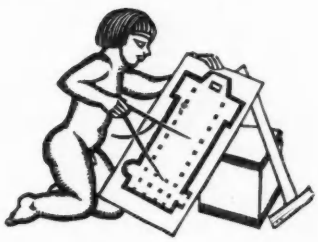
THE ARCHITECTS' JOURNAL



WEDNESDAY, JULY 3, 1929

THE STATE AND PATRONAGE

"We have time to consider our Pleasure in making things."
WILLIAM MORRIS

WITH a Socialist Government in power, the vexed question of how far the State shall patronize art is bound to come to the front. An answer is suggested by Sir Reginald Blomfield in his letter to *The Times* of June 20, wherein he deplores the expenditure of £100,000 on the Cornaro Titian and the Wilton Diptych. Like a true Englishman, he wants to have his cake and eat it, too, for he asks, first, that such a large sum shall not be spent, because we, being overtaxed, cannot afford it, and, secondly, that the money shall go to relieve unemployment among young painters (of pictures, not houses). Nevertheless, his letter renders a service to art and artists in England.

Thus far, it is true, our national custom of buying old masters has proved at least to be a good investment, even, we think, from the taxpayer's point of view. The National Gallery is world-famous and draws wealthy visitors from all over the world to this country, where they leave a fair amount of money. Moreover, when we consider the enormous sums spent on advertisements, cars, tobacco, and clothes, the £100,000 for two pictures, one by a very great master, the other by an unknown and possibly English artist, beautiful and uniquely interesting, does not seem disproportionate. We can at least give our mite gladly.

But all must agree with Sir Reginald Blomfield that the patronage of living artists is highly desirable. The difficulty lies in their selection and employment. The walls of the Tate Gallery are limited, and the continua additions by the Chantry Bequest, by private donors, and by the cautious expenditure of the Government grant, insure an annual increase to the number of pictures, and so a running illustration of the phases of British art, so far as the easel picture is concerned. Where encouragement is needed is in the development of the wall picture or fresco. The splendid scheme for the decoration of the gallery in the Houses of Parliament, which owed so much to Mr. Thomas Wilson, the Master of Works, shows how much can be done in this way. It has been followed by the delightful paintings in the tea-rooms of the Tate Gallery and Ken Wood.

We suggest that in these instances there is a stirring of our national artistic conscience. We welcome these few efforts, and feel uneasy at having so long neglected the architectonic side of painting. Cannot we proceed by the way of State patronage to develop a national school of wall decoration? There is one type of building which lends itself eminently to such a procedure; we refer to the public rooms of the ordinary Post Office. The Post Office officials and the public are already used to the presence of picture-frames on the walls of these rooms, but the frames do not contain pictures, but only advertisements of plays, beers, corsets, patent foods, and the like. Here is scope for our young artists to give us modest schemes of mural decoration, the subjects not evolved always out of a classic golden age, or an historic past, but indicative of modern life as lived in factories, offices, farms, streets, and houses.

With regard to sculpture the State in the past has unhappy experiences of vast schemes, such as the Albert Memorial and the Queen Victoria Memorial, which succeeding generations have scorned. We believe that these failures were due to a lack of mutual understanding as between architect and sculptor, and that here, as in painting, the road to success is being made clear. But before we can advance along it, it is necessary that these arts should be removed from the realm of speculation and inflated prices, and cease to rank with misprint Bibles and the world's rarest stamp. If the art of architecture is vigorous today it is because buildings have remained, in comparison with paintings, untouched by the incubus of rarity value. It is time the powers that be caused its hold upon painting to be relaxed.

NEWS & TOPICS

THE ALLEGED "BUILDING AGREEMENT"

I AM glad to hear that the question of the mysterious "building agreement," alleged to have been made by Mr. Wheatley with the building industry in 1924, is to be explained by the new Government. The existence of an agreement for building with State help 2,500,000 houses before 1939 has been taken as "gospel" by many housing reformers, but I have never been able to find any legal document that constitutes a binding agreement. It certainly is not to be found in the 1924 Act. There are, of course, several reports, couched in cautious and conditional phraseology; but reports are not legal agreements. This question is coming to the fore in the near future, as Mr. Arthur Greenwood, the Minister of Health, is known to be considering whether to abide by his predecessor's decision to terminate all subsidies to private builders at the end of next September, and still further to reduce subsidies for houses built by local authorities. The building industry is profoundly divided on this subject. On one side, Mr. Barron and the building operatives are clamouring for the alleged "agreement" to be implemented; on the other, the building employers make no secret of their conviction that subsidies have had a profoundly dislocating effect upon the building industry, and are no use either to architects or contractors.

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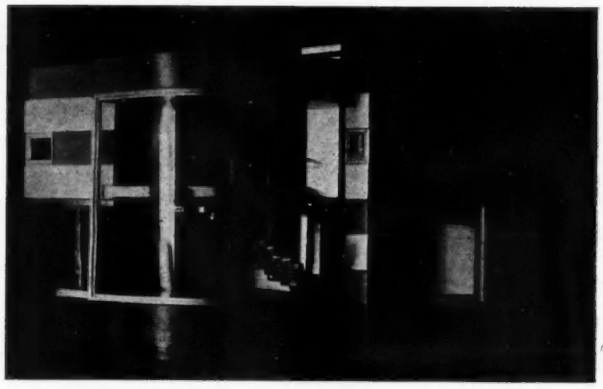
TO PRESERVE RURAL ENGLAND

When the Prime Minister sends a message of encouragement and support to the Council for the Preservation of Rural England, he is taking a course reasonably likely to be efficacious—namely, assisting to mobilize public opinion. For, as he says, it is on this rather than on restrictive legislation that the hopes of champions of English beauty must mainly repose. Public opinion is, particularly in this country, a very potent force; to it, far more than to any legal restrictions, is due the increase in sobriety. People must live further afield and make holiday where they will. Expansion is inevitable. Many, however, have yet to learn to live in the countryside without offering offence thereto—the architect's opportunity, one would have thought. But who, among that section of the lay public most in question, is aware of his functions?

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A GLASS VILLA

People may yet live,literally, in glass houses. Its potentialities as a building material are very much in evidence in Germany at the present moment. A practical demonstration of its many architectural uses, writes my correspondent in Germany, has been provided by the recent revetment of a large four-storied café in the centre of Berlin, with plain, horizontal sheets of opaque glass, alternately milky white and dark blue, to the designs of Luckhardt and Anker. And the illustration shows a model of an all-glass villa which has been planned by Emanuel Josef Margold, a Viennese architect practising in Berlin, for the United Plate-Glass Manufacturers' Association of Germany. This is the first deliberate attempt to employ glass not merely as a facing substance, but actually as an independent and self-sufficient constructional material. The whole of this model—not merely the walls and windows, but also



Model of a villa to be constructed entirely of glass, planned by Emanuel Josef Margold, a Viennese architect practising in Berlin.

the staircase, doors, floors, banisters, and even the very furniture—has been made of different types of ordinary standardized commercial glass.

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ADVERTISEMENTS *v.* ARCHITECTURE

How is an architect to square his sense of ordered street architecture with the demands of advertising agents and theatre owners? Walking down Haymarket lately I cocked a critical eye in the direction of the new Apollo Theatre to see whether I liked the carved balconies and pediments better than formerly. They had gone. Each "feature" with mathematical exactitude had been covered by an advertisement specially designed for the purpose, leaving not a square foot of stone enrichment. I felt thankful for the thoroughness that left nothing to comparison, but my heart bled for the architect of this very presentable piece of street architecture. Could he really be expected, thought I, to take such devastating factors as this into account when he designed the façade, and was he right in ever supposing the theatre, much less the "talkie," to be content with neat announcements under the canopy at street level? It is a perplexing problem which even the all-too-blank walls of Mr. Emberton's new Olympia seem to leave unsolved, for if you leave the frozen-faced signwriters a large empty space to fill, you cannot guarantee that they will fill it well or even keep within its limits. It seems an essential part of their low calling that their most brilliant efforts are made in the face of difficulties.

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FOR SLUMS, A FAIR GARDEN

The opening last week of the Tabard Garden, Southwark, completes a very noteworthy piece of slum clearance in one of the most congested districts of London. The work has covered a period of twenty years and has involved the provision of accommodation for more than 3,500 people and the removal of 650 insanitary houses. The difficulties and heavy expenses of slum clearance could find no better illustration than this example, carved out of a solid mass of mean dwellings. Five acres of garden at £15,000 per acre make the cost of land alone £75,000, to which had to be added a further £15,000 to fit it to the uses of a park and recreation centre. One and a-half acres of this land cost London more than the whole 800 acres of Hainault

Forest, or the 80 acres of Avery Hill at Eltham! It is not too much to pay for the reclamation and absolute salvation of a district once notoriously unsafe for the ordinary citizen, since the returns on this capital will flow unceasingly hereafter, but does it not set a value on forethought and wise town planning, and does it not make us sigh for power to deal with the town, as we have power to deal with the country?

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A RECORD IN TOWN PLANNING

Professor Patrick Geddes, who is at present planning a university at Montpellier, in France, has a most remarkable record of achievement. For the past fifteen years he has been planning towns, first in India, and then in Palestine, where he planned the new lay-outs for Jaffa and, finally, the all-Jewish town of Telavia, the population of which has risen from 1,000 to nearly 100,000. The university at Montpellier is to be a sort of city for co-national intellectuals. There is now building a Scots college (surely this is unique?), followed by an American college and an Indian college, with the colleges of other nations to follow, as opportunity and international co-intellect allow.

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THE LIFE OF A SKYSCRAPER

Nobody knows quite how long a skyscraper may be expected to live. It has been variously estimated at from twenty to a hundred years, and there is really no reason why it should be less than a hundred if it is assumed that a skyscraper is worth repairing and tinkering with. It is yet to be discovered that steel built in framework seriously deteriorates over long periods of time, or would suffer by the work of replacing defective members here and there. There is no reason why it should. Skyscrapers are usually demolished for purely economic reasons, their equipment and architectural style more than their structures bringing them into a state of obsolescence. Their economic life, as apart from their expectation of physical longevity is estimated at forty years, and with this estimate we have no means of differing.



Mr. J. B. Wride, winner of the Rome Scholarship, whose drawings are reproduced on pages 14-17 of this issue, took the diploma course at the Welsh School of Architecture, Cardiff.

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MR. WRIDE'S DRAWINGS

The Welsh School of Architecture, Cardiff, will very naturally be jubilant over the award of this year's Rome Scholarship for the first time to one of their scholars. Mr. J. B. Wride, while passing through the Technical College, won numerous prizes in addition to taking the full diploma with distinction, obtaining his R.I.B.A. Associateship as a result. They say that the draughtsman's craft is waning among architects. I have seen Mr. Wride's actual drawings, reproduced elsewhere in this issue, and I declare that it is not so in his case. I have rarely seen finer penmanship.

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CANALETTO IN ENGLAND

The Magnasco Society have gathered together from the Royal Collection at Windsor and from other private sources an interesting and representative exhibition of the art of Antonio Canal, or Canaletto (1697-1768). Though Canaletto was an Italian, and did his best work in Venice, he paid a long visit to this country under the patronage of English noblemen, and for nearly nine years was painting in London and the country. He must have found the Thames of the eighteenth century a very passable substitute for the Grand Canal of his native Venice, for he left many canvases and sketches of that once so popular and colourful stream. One in particular, crowded with the barges and smaller traffic attendant upon the mayoral retinue in progress to the city, might be the foreground of a Venetian: the background is London, with Westminster, Lambeth, and, curiously enough, St. John's, Smith Square, clearly delineated.

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EDITORIAL ART IN A REPORT

In the preface to the latest regional planning report, covering the West Sussex coast and the Downs, the author, Mr. Arthur H. Schofield, pays a happy tribute to Mr. George L. Pepler at the Ministry of Health, describing him as "a singularly unselfish and enthusiastic participant in official 'reconstruction.'" I like the format of this report; it is far easier to handle and to read than the rather awkward volumes previously issued, and I take particular joy in the enlivening quotations. For example, Part I, concerned with the survey of Sussex, is headed with Kipling's lines:

> Here the Old Gods guard their round,
> And, in her secret heart,
> The heathen kingdom Wilfrid found,
> Dreams, as she dwells, apart.

Another adroit touch concerning the application of zoning is from *The Pilgrim's Progress*:

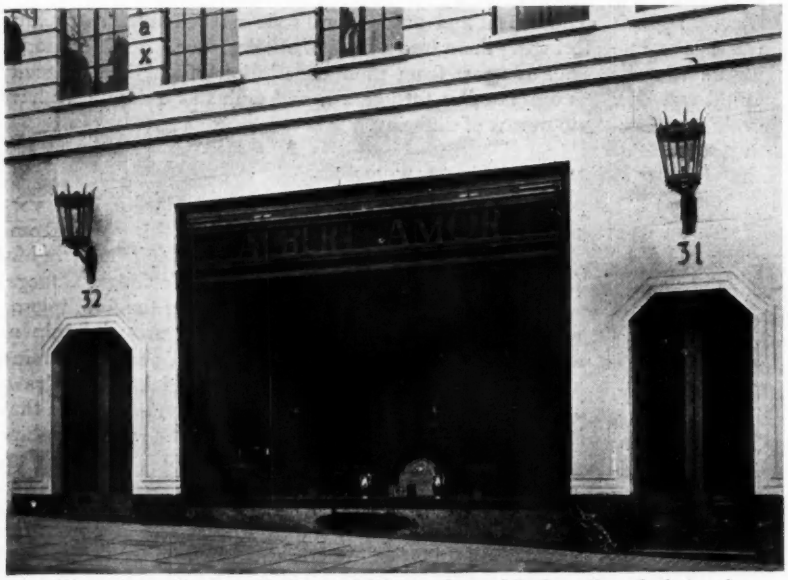
> Who . . . but would have one of these Maps about him, that he may look when he is at a stand, which is the way he must take?

I also like two dicta applied to the need to control building:

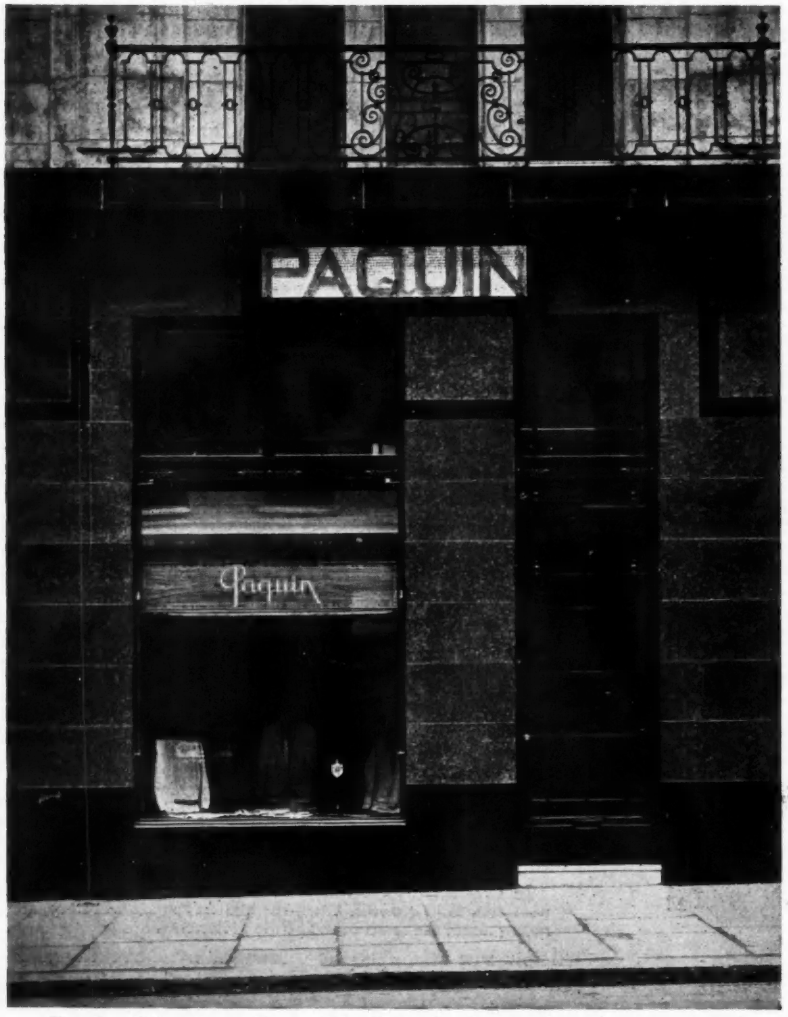
> In twenty years the whole face of the country will be spoiled with bungaloid growths, in which childless couples will sleep, after racing about the roads in their little motor cars.

Below this characteristic onslaught by Dean Inge, Mr. Schofield gives the old Sussex saying, "We *won't* be druv." This is to understand the gentle editorial art.

ASTRAGAL



Albert Amor, St. James's Street, S.W.1. A careful piece of work that seeks to lift the antique shop out of the rut of period work.



Paquin, Ltd., Dover Street, W. This façade was born in a street and breathes the limited atmosphere of the pavement.

SOME RECENT LONDON SHOPFRONTS: ii

BY E. MAXWELL FRY

ST. JAMES'S STREET must have breathed again when the solid and quite dignified shopfront of Albert Amor was inserted in the ground floor of a commercial building, the qualities of which are slackness and incompetence. This shopfront is a careful piece of work, as needs must be a design that seeks to lift the style of the antique shop out of the rut of period work. It is not really well proportioned. The openings are quite unrelated, and the window opening too abrupt. Nevertheless, it is finished and has style.

How far removed it is from the type of modern shopfront represented by Paquin may be seen by comparing the photographs. The care for detail and enrichment is replaced by a contrast of material, and this façade was born in a street and breathes the limited atmosphere of the pavement. Its antecedents never stood in open spaces. It is not, in the old sense of the word, an exterior. The shopfront of this type might be compared with the framed picture, a degeneration from the more architectural fresco painting.

The little milliner's, Madelon Chaumet, builds up its charms within the framing of post and lintel, and has, as it were, absolutely no connection with the next-door premises. It can be seen that the laminated marble slabs close in the window space and focus the attention, while name and number are woven into an intricacy of metal and glass in the space above.

The exceedingly clever adaptation of an old shopfront that distinguishes the business of Best and Lloyd can hardly be realized from the photograph. Black, red, and gold are not well differentiated by the camera, so that the importance of this little shopfront will only be fully grasped by those who can go out of their way to visit it.

Revelation, in Piccadilly, might be taken as a warning against the too easy acceptance of a new style. What is elsewhere light and natural to the purposes of the shop and the exigencies

of the site, is here forced and uncouth. Window space is cramped and looks it, while good light is shut out for no reason. The design is a conflict of uneasy lines and disturbing angles. It is, indeed, a dreadful warning.

In Helena Rubinstein's shop we find all the tricks of the shopfitter used with knowledge and artifice to produce a work that bears the stamp of an artist. This design is baroque in its well-calculated balance of unequal forces, and in the light play of contrasting surfaces and receding planes. It is interesting to notice how the structural properties of plate-glass have been given significance in the circular-ended display window. You realize at once that plate-glass, the arch-villain of former settings, is the main support of this piece.

The design is a fine example of virtuoso, as incapable of general adaptation as would be a ballet setting for, say, "le pas d'acier." But though it indicates no safe road for many to follow, it will act as a stimulant, an iron tonic after too much Wardour Street fare.

Finally, Riddington's, of Dover Street, is as full of colour as the last example is cold and steelbright. The brilliant colours of the glass and metal sign are toned down on to a surround of mottled green vitreous tiles. It is a compliment to the vigour of the design that while it surprises with its Jack-in-the-box colouring it offers no offence to the façade above it or to the street at large.

(Concluded)



Madelon Chaumet, Berkeley Street, W. The laminated marble slabs close in the window space and focus the attention.



Best and Lloyd, Great Marlborough Street, W. An exceedingly clever adaptation in black, red, and gold—unphotographable tone-values.

COMMERCIAL FACADE COMPETITION

On page 13 is illustrated the winning design of Mr. Keith D. P. Murray, A.R.I.B.A., in the open competition promoted by the Incorporated Association of Architects and Surveyors for a design for the front of a typical commercial building out of 177 designs and perspectives submitted.

In their report the assessors state: The chosen design is distinctive and speaks for itself, with an additional suggestion for the co-operation of a sculptor at the parapet level. The attic would not be seen from the street. The fenestration ignores the floor lines and observes no difference between the showrooms and offices. Light is amply insured. The projecting signs if revised might be very effective, and the copper-covered pent should be reconsidered. The lettering on the shop windows is execrable.



Revelation Suit Case Co., Ltd., Piccadilly, W. Window space is cramped, and light shut out for no reason; here is a conflict of uneasy lights and angles.

Helena Rubinstein, Grafton St., W. Knowledge and artifice produce a work bearing the stamp of an artist.





Riddington, Dover St., W. A design full of colour; the brilliancy of glass and metal is toned down on to a surround of mottled green vitreous tiles.

Some recent London Shopfronts.]

THE PLANNING OF THE NEW YORK REGION

(Being extracts from a paper read before the Royal Institute of British Architects at the special general meeting on Friday, June 28, 1929.)

BY THOMAS ADAMS, F.S.I., P.P.T.P.I. General Director of the Regional Plan of New York and its Environs.

THE PROBLEM IT PRESENTS

The picture of New York which many visitors to the New World conceive in advance and find true to their pre-conception on arrival, is the view of Manhattan Island, with its dominating mass of high buildings. Yet Manhattan Island is only a two hundred and fiftieth part of the real New York—that is of the urban area which is economically related to the Port of New York. Manhattan is linked with Long Island, the metropolitan area of New Jersey and Westchester County by bridges and tunnels that make the region nearly as much a unit as London County. Its great water-fronts have potentialities for harbour and industrial development which are probably unsurpassed. Out of twelve railway companies that serve its port, nine have their termini only in the State of New Jersey, and nearly half of the best water-front on the main harbour, comprising the upper bay and lower Hudson River, lies in that State, and therefore outside of New York City. Taking a similar area in the London and New York regions the population of the latter is now about half a million greater than the former.

Here is a brief summary of outstanding features from the regional plan reports:

The region comprises 5,528 square miles and has 436 separate authorities exercising local government. Within the whole region there are about 10,000,000 people, of whom 6,000,000 live in New York City. In 1926 annual taxes levied in the region aggregated about £117,000,000. The total value of taxable land in 1923 was about £1,832,854,000. In 1926 there were in New York City 421,000 passenger automobiles, 107,000 trucks, and 34,000 taxi-cabs. There are 1,890 miles of railway right of way and 690 miles of rapid transit track in the region. Uniting the railway system, there are ninety-three car float bridges, while 121 railway bridges connect the systems over navigable waterways. The factories in the region number over 60,000 and have trebled in number since 1900.

THE MAKING OF THE SURVEY AND PLAN

No official body existed or could be created to make a plan of such a region. In 1921 the late Mr. Charles D. Norton, a leading banker, interested the Russell Sage Foundation in a movement to prepare a plan by an advisory committee. The committee was launched in 1922. During seven years a sum of over £250,000, provided by the Russell Sage Foundation, has been spent. About half of that sum would have to be spent in London to accomplish similar results. Probably little over half of the expenditure named has been devoted to the actual making of the survey and plan.

Leading architects and engineers in New York gave liberally of their time, very largely without remuneration, to consultations and to supervision of specific proposals. In the making of the preliminary survey in 1923 the writer was associated with five of the leading city planners in the United States. Following this survey, the specific fields for more extended inquiry were selected and the scope of the plan decided upon. For five years from October 1923, the work of making a complete survey and plan has proceeded under the writer's direction.

It is impossible to describe here the various technical processes involved either in securing the necessary degree of co-ordination between various studies or in preparing the maps illustrating the plan. An exceptional difficulty may, however, be referred to. In New York region there was no basic map which could be used for making a plan. Had there been maps in existence, such as the Ordnance Survey maps of England, it would have been possible to have carried out the work with much less expense and more accuracy of detail. One of our first duties was to make a map which could be used as the basis for the plan on a scale of 2,000 ft. to 1 in. This was done with the aid of the Federal Government.

Before describing the contents of the plan and the assumptions on which it is based, I will refer briefly to the subjects covered by the survey. The first three volumes dealt with the major economic activities of metropolitan growth and arrangement. They contain reports of economists regarding the location and space requirements of industry in the region. A second report presented the results of investigation into the distribution of population and land values. It also contained a description of government organization and finance. One important factor brought out in the population studies was the probability that the population of the region was likely to be not less than 21,000,000 in the year 1965, which was the year the staff had in view in preparing the plan.

The third volume contains the investigation of the problems of traffic, and the fourth of the problems of transportation and transit. The subject of public recreation in all its phases is discussed in volume 5. Volume 6, not yet published, contains a discussion of what is called "zoning." In volume 7, the planning of cities, towns, and villages and neighbourhoods is treated with some elaboration. A specific proposal is put forward in this volume for planning neighbourhood units along the line so well carried out, in accordance with Mr. Raymond Unwin's plan of the Hampstead Garden Suburb. One principle which we advocate in this connection is that the urban neighbourhood of the big cities differs from the old village pattern in the respect that it has to be developed between the major arteries of communication and not along both sides of them. The final volume of the survey deals with the question of physical conditions and public services.

From the numerous findings of the survey, the following are selected as having a bearing on what will be said in this paper regarding the regional plan:—

1: It is essential for public well-being that the *per capita* standards of health, comfort, and safety of the population be raised above present levels.

2: It is essential for convenience and efficiency in transaction of business that movement should be fast, have the least possible degree of interruption, and have ample space for parking.

3: It is essential for places of work and places of residence to be conveniently related to one another so as to lessen unnecessary travel and yet to be separated enough to secure concentration of industry on the one hand, and restful surroundings on the other.

4: It is essential for the prosperity of the community that concentration of buildings and economic activities should not be greater than clearly desirable for efficiency of industry.

5: The causes underlying congestion in New York are: Overbuilding on the land; defective use of land and buildings; ill-balanced arrangement of transport and transit facilities and streets.

6: The indiscriminate process of so-called "decentralization" is likely to be of little benefit in securing better-planned communities. What appears to be wanted is, first, diffused recentralization of industry; second, diffusion of residence into compact neighbourhoods integrated with industrial sections; third, sub-centralization of business.

7: In these days when hours of leisure are on the increase and the spreading tentacles of the city are pushing the rural area farther away from the urban areas, a much larger percentage of well-distributed space for parks and playgrounds is needed than formerly.

8: The regional plan should not be confined to those matters which can be carried out under statutory city or town plans. It should be a flexible plan dealing *inter alia* with trunk line railways, rapid transit lines, harbour and waterway improvements, freight distribution, bridge and tunnel projects, reconstruction of built areas and possibilities of new building development, as well as with highways, zoning, and parks.

9: The plan has to be divided into two parts, one designated the graphic regional plan and the other the building plan; the one dealing with the broadly horizontal features and the other with the broadly vertical features of growth. The graphic plan shows in atlas form and description the facilities for circulation that are needed or likely to be provided. The discussion of principles affecting building development and concrete planning projects, including those that relate to the architecture of the city, form the second part of the plan.

10: The primary task is to make a comprehensive ground diagram. Order and beauty of public and private buildings and of centres are of the highest importance, but they are, in an important sense, by-products of what may be called orderly ground planning.

SCOPE AND CONTENTS OF THE REGIONAL PLAN

The making of the plan was an evolutionary process throughout the period of making the survey and organizing the machinery to carry it out. A city can never be a complete work of art, but it expresses, always in some state of incompleteness, either good art or bad art. One of the greatest blunders of these days of so-called advanced civilization is our willingness to accept bad art on the plea of the practical man that it is necessary for economy. We do not do things badly because of economic necessity, but because the majority who influence public policies and the building of cities do not think of facts in their totality and interrelations.

Before considering the contents of the plan it is well to have in mind that it looks forward over a period of forty years, and that it does not contemplate changes more vast or expensive than those that have taken place in the last forty years. Nearly 40,000 acres have been added to the open spaces of the region in the last seven years. The development of the park system of Westchester County has been such that it has been adopted as the standard for the regional plan for the rest of the region; in other words, the plan does not conceive to be necessary any higher standard, in respect to either design or extent of open spaces, throughout the region, than has already been accomplished in one county.

THE GRAPHIC REGIONAL PLAN

It is impossible to describe even in the form of a summary all the proposals made in the graphic plan. To give a descriptive list of them would take a whole day. They include 471 proposals.

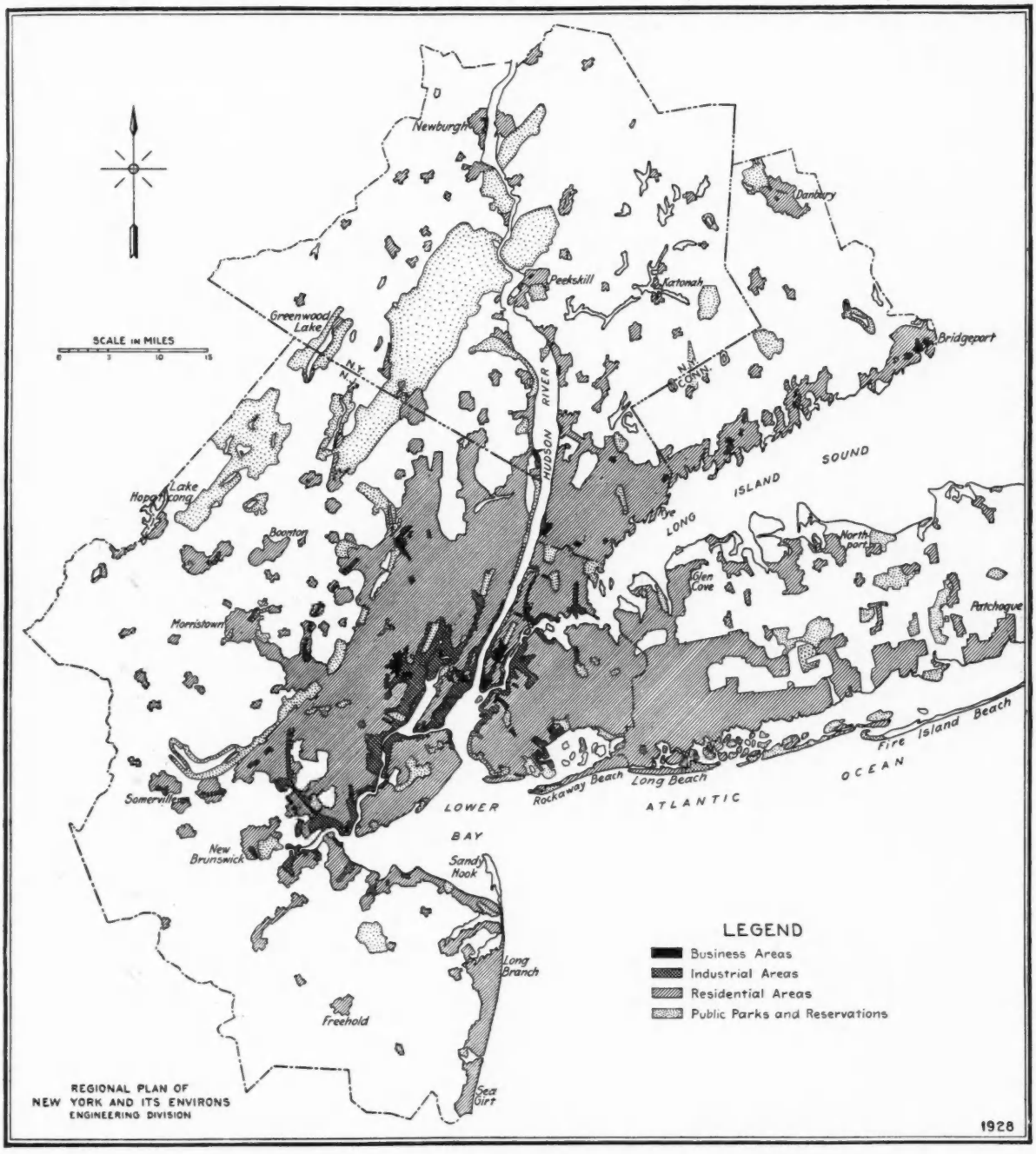
In preparing the plan it has been recognized that improvement of living and working conditions and the development of the present port of New York are the matters of the greatest importance in planning the region; also that suburban rapid transit has to be considered independently of trunk railway facilities and that the classification and co-ordination of the highway system through the whole region is essential to secure effective road communication.

The plan includes a statement of the order of importance of the most urgent improvements under the headings already mentioned. Among these is a proposal to acquire a right of way for a wide corridor in the form of a metropolitan loop, within which there would ultimately be placed electrified railways and parkways, with satellite communities at strategic points. Early action is suggested in regard to extended electrification of railways and elimination of grade crossings; and the carrying out of a definite first step in extending the rapid transit system; the building of one new bridge connecting the boroughs of Manhattan, Queens, and The Bronx, with appropriate connections and approaches; the development of four new parkways in river valleys of New Jersey; the acquisition of land to extend the park system of the region; and the removal of buildings from the East River Islands to increase the park areas in New York City.

The distribution and character of land uses has the widest significance in the regional plan. They have a relation to everything that has been referred to in connection with transportation. Also, as we determine them, we fix to a large degree the character of the industrial areas and the workers' homes, the shopping centres and subcentres, and the residential neighbourhoods. As we obtain through intelligent planning a proper balance in these uses we get the real foundation of orderly growth, and we discover the appropriate sites for public and semi-public buildings: the town halls, the art centres and libraries, the churches, theatres, schools, and fire stations, not only in the metropolitan centre, but in hundreds of satellite communities. Next, in relation to all these uses, and to the facilities for transportation, there are the open spaces so distributed and integrated with the pattern of urban growth as amply to supply the needs of recreation and also provide the opportunities for the healthy situation and display of buildings. When we think of all these varieties of land uses and functions of building, we realize the impossibility of the task of attempting to secure any complete unity in their design and control. We have to content ourselves with getting a well-balanced distribution and reciprocal relation of functions, a greater amplitude of open area, and depend for the rest on education.

THE BUILDING OF THE CITY

While it has been said that the ground plan has to be



A general plan of New York and its environs, showing the land uses suggested as the result of five years' activities on the part of the director and staff of the regional plan of New York.

considered in advance of building development, this does not mean, of course, that the questions of building design and arrangement have been lost sight of at any stage during the study and planning of the land and means of circulation. As consideration is given to railways, airports, highways, and aerodromes, we have to create in our imagination railway stations, waterfront terminal buildings, centralized warehouses and factories, bridges, tunnel entrances, petrol stations and garages, and aerodrome buildings. These are incidental to transportation and must serve its needs, but all of them are in the nature of approaches or gateways through which the city is entered.

New York is rapidly expanding in its suburbs, but constantly rebuilding in its central areas. Three-quarters of the region will not be built upon during this century, but all of it is, or may become, potential building land in the eyes of the owners and of the communities who assess it for taxation. One of the difficulties in the region is to dispel the prevailing and erroneous assumption that large estates and farm lands are improper uses of land within the

environs of the city, and that it is a sign of progress to cut up all land into small plots for building, whether it is likely to be wanted or not for this purpose.

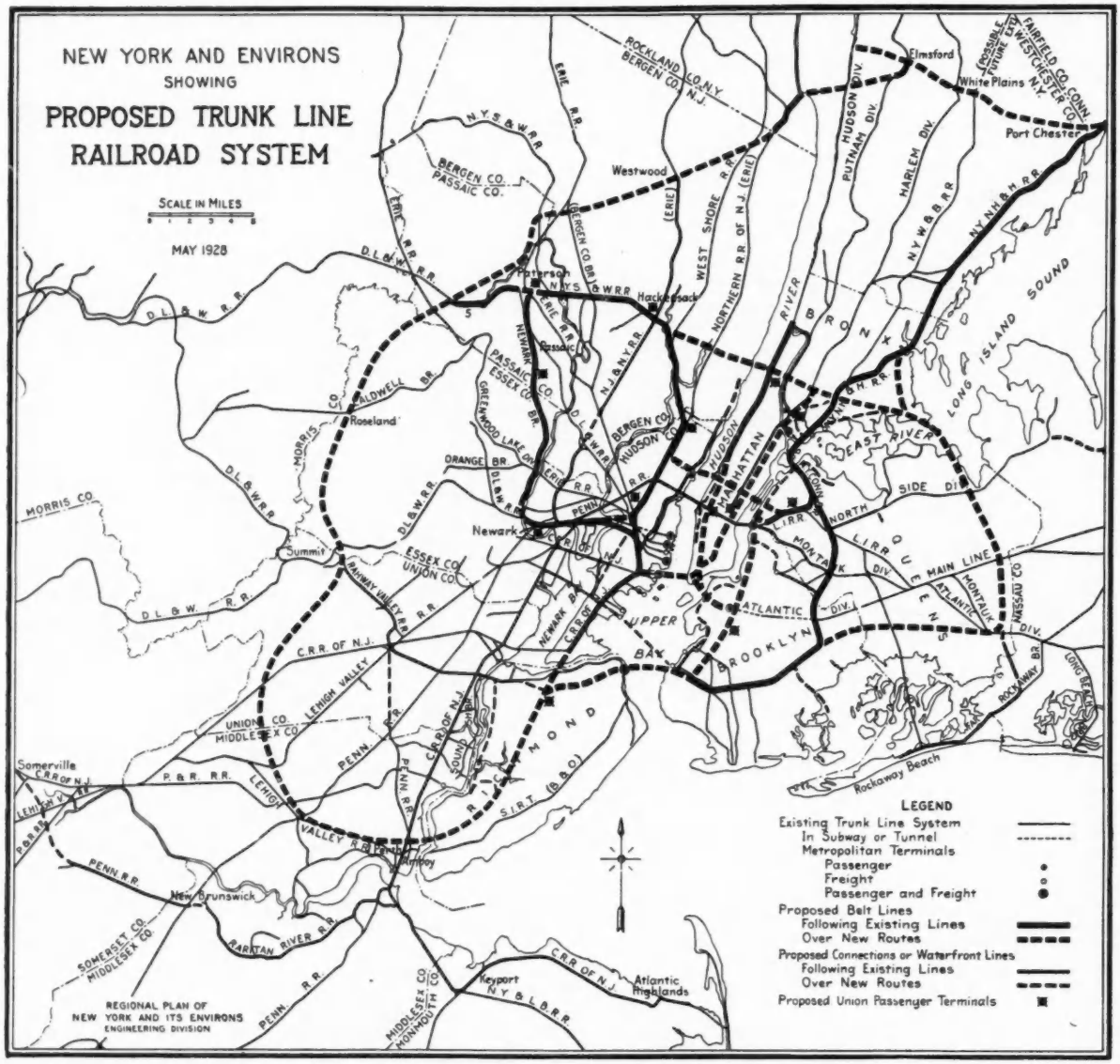
In the plan there are included four kinds of specific projects as illustrations of possibilities. It is not wasteful to present architectural conceptions of what might be done, even if it is recognized that they will never be carried out as proposed. The inclusion of such imaginary projects —if not too visionary—is essential for purposes of education and for inspiration.

without a political boundary, such as the Jamaica Bay or Hackensack Meadow sections.

(*d*) Elevated streets and places.

In concluding this brief reference to the building of the metropolitan city of New York a word or two must be said as to the skyscraper. In the regional plan, skyscrapers are not condemned, but are approved only when they have ample space about them for light and air. Proposals are made to show how this space can be obtained.

Skyscrapers do not increase traffic congestion when this



Plan of the immediate environs of New York, to show the proposed trunk line railway system advocated in the regional plan.

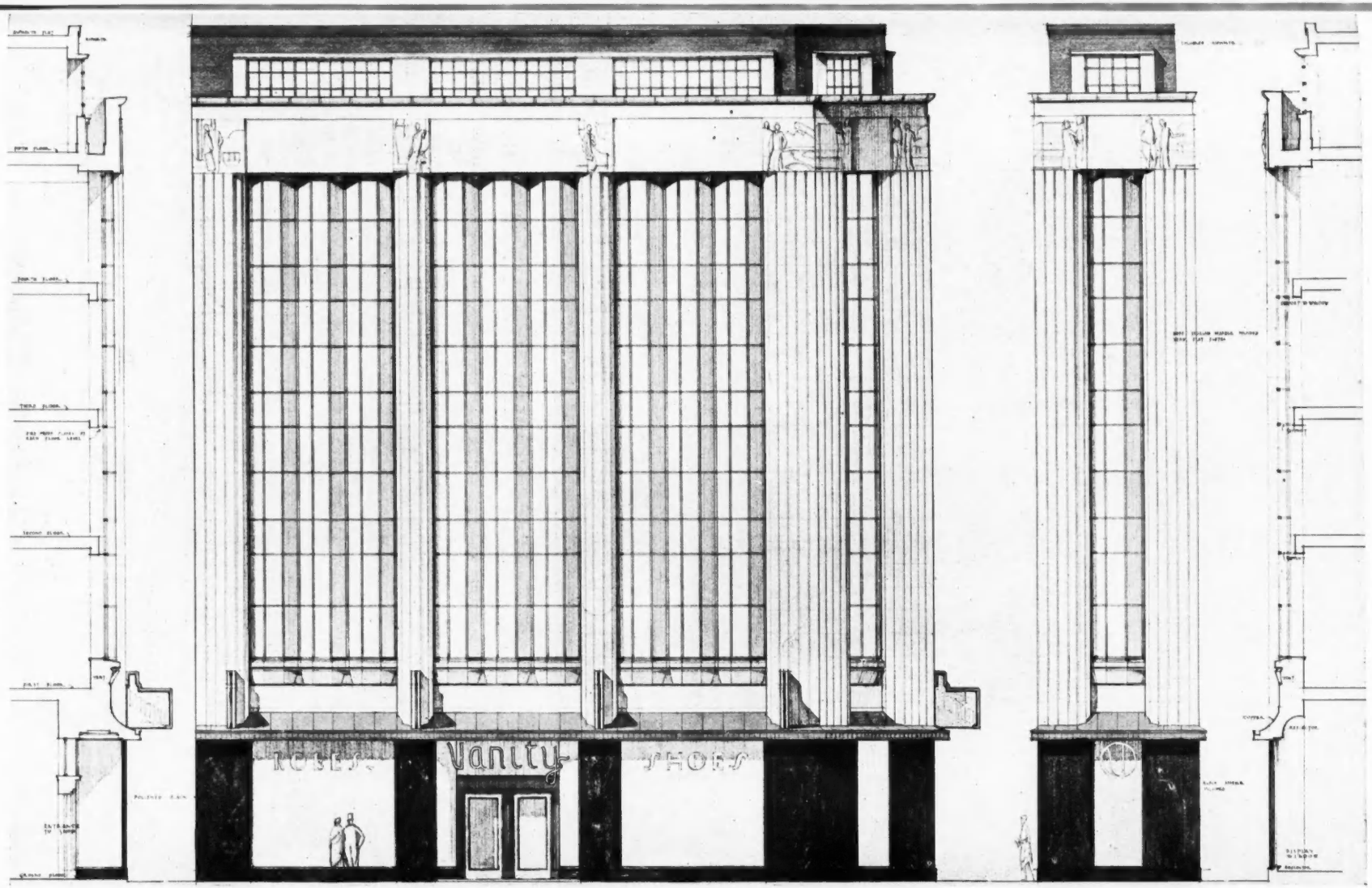
The four kinds of project alluded to are examples of possibilities in the design of :

(*a*) Municipal art and transportation centres, including a model airport and its approaches.

(*b*) Treatment of typical waterfronts, river valleys, and islands.

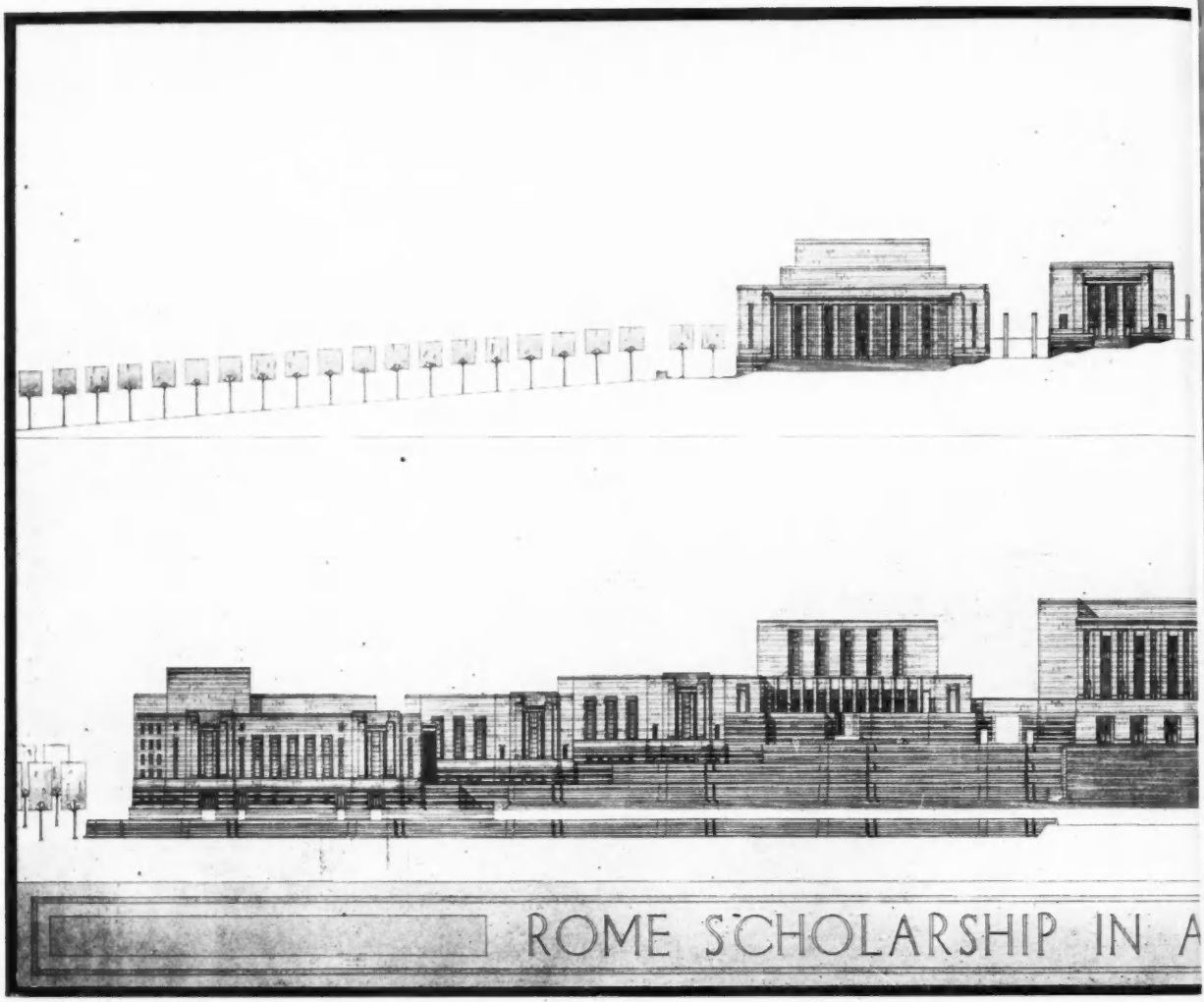
(*c*) Planning of large sections—that is, smaller units than the region and larger than neighbourhoods, but

space is provided and when the average height of buildings in a large district is the same with the skyscraper as without it. Elevated streets and paths are only approved where they are necessary as a last resort to remedy an existing congested condition, or where they are part of the architectural design of a large group of buildings, or where the configuration of the land along the waterfronts makes the provision of streets on two levels the natural and appropriate form of treatment.



1929 OPEN COMPETITION FOR FRONT OF TYPICAL COMMERCIAL BUILDING.

The winning design. By Keith D. P. Murray. The prize of 50 guineas was offered by the Incorporated Association of Architects and Surveyors, "in order to encourage the study and development of architectural design on sound modern lines, acceptable both to the artist and the man of business." The imaginary site was a corner one, with main frontage to the south-west. The assessors were Maurice B. Adams, Alexander Maclean, and H. Gordon Selfridge. The other awards were as follows: second place, R. J. Duke; third, F. E. F. Atkinson; fourth, A. R. Clare; fifth, W. A. Reeves.



The subject set for the Rome Scholarship Competition was "A Memorial to a Composer." The memorial was to take the form of a group of buildings dedicated to the memory of the

THE ROME SCHOLARSHIP

WINNING DESIGN

ON the recommendation of the Faculty of Architecture the Council of the British School at Rome have awarded the Rome Scholarship in Architecture for 1929 to Mr. James B. Wride, a former student of the Welsh School of Architecture, Cardiff, and an Associate of the R.I.B.A. Mr. Wride, who is twenty-four years of age, was educated at Monckton House School, Cardiff, and completed a five years' architectural course at the Welsh School of Architecture. He was a finalist for the Rome Scholarship in four successive years.

Candidates were not required to design to any specific style, the competition being regarded as a test of the candidate's ability to solve a given problem and of his competence in design and technique.

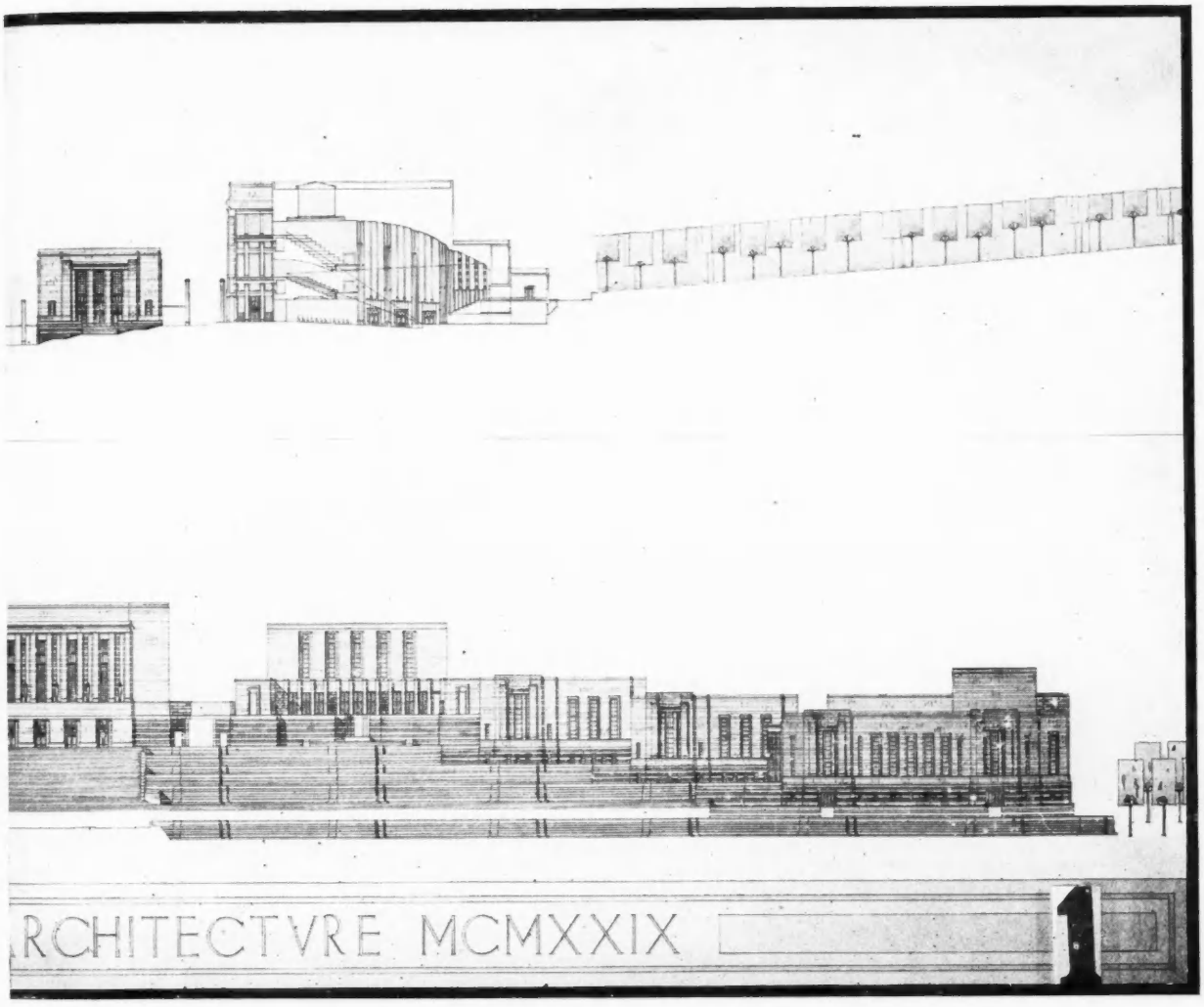
The subject set was "A Memorial to a Composer." The memorial was to take the form of a group of buildings dedicated to the memory of the composer, to musical performances on a large scale, to the history of musical art, and to the recreation of the people. It would be a centre of pilgrimage, of service to the advancement of music, of stimulus to young artists, of repose and enjoyment of the masses, and at the same time a retreat for musicians whose services had entitled them to tranquillity and comfort in their declining years.

The nucleus of the scheme was to take the form of a large concert hall, seating at least 3,000 people, with a stage on which might be given symphonic orchestral concerts with full choral effects. This concert hall was to be the principal unit in a group which would also include a smaller theatre used exclusively for operatic performances, with a seating capacity of 1,500; and a group of two or three smaller halls, with a capacity of about 500 each, for the recitals of soloists and for chamber music.

All these units were to be completed by their various services, and to be designed with all the equipment and accessories required, and with especial regard to their acoustic qualities, which were to be as perfect as possible.

In addition to these units there were to be a museum of musical art and instruments, a special museum to the memory of the composer, and a library of musical reference.

There would also be a number of small individual studios in which the visiting musicians might practise, study



IN ARCHITECTURE, 1929

BY JAMES B. WRIDE

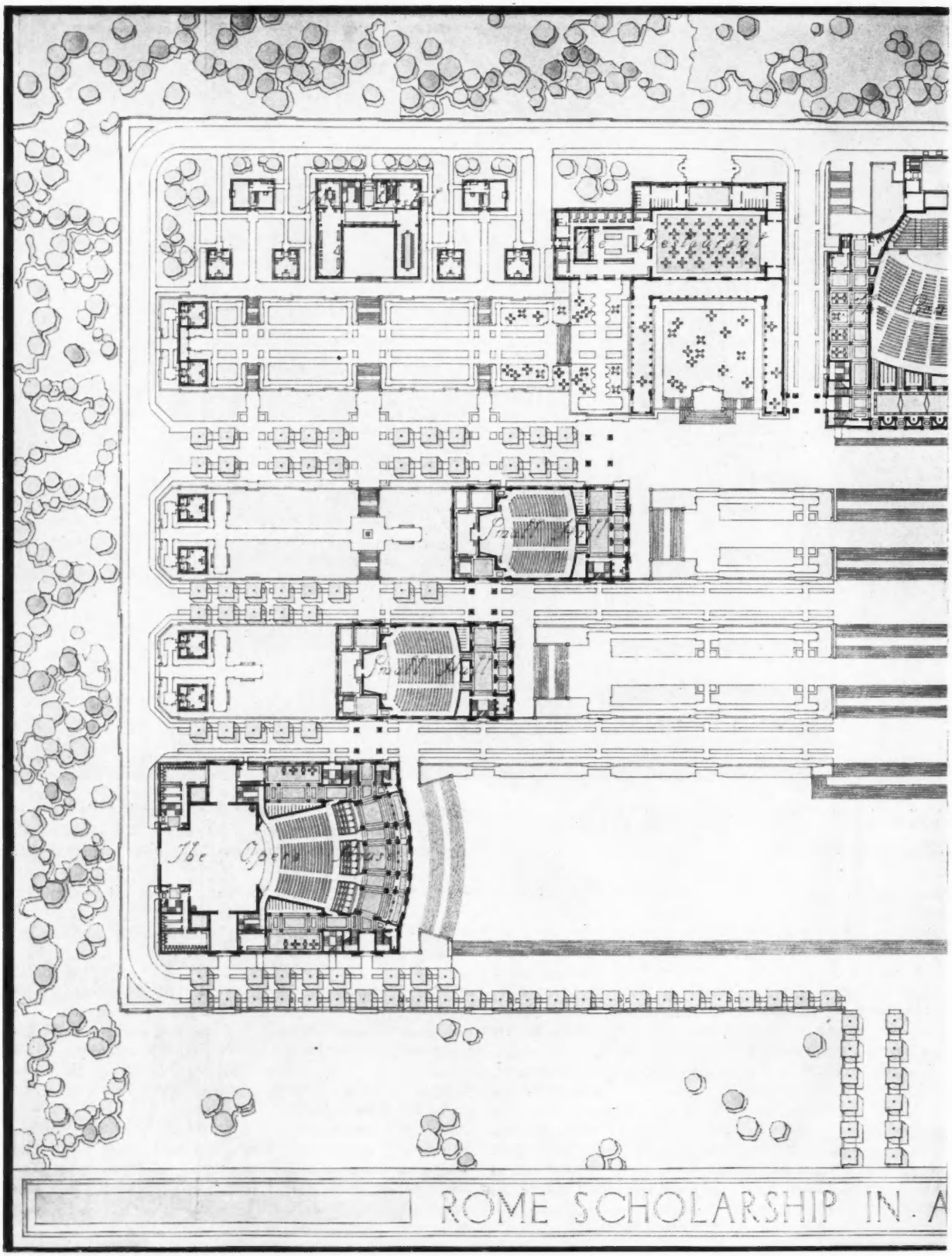
composer, to musical performances on a large scale, to the history of musical art, and to the recreation of the people. Reproduced on this page are elevations and a transverse section of the winning design.

and compose. For these visitors were to be provided a hostel, with living and sleeping quarters and with appropriate services; restaurants and cafés, under cover and in the open air, dance floors, terraces and promenades being provided for the public. A few small private houses for retired artists, and homes for the personnel, the curator, etc., were also required. The homes were to be reasonably secluded, standing in their own grounds, or might be considered as small apartment buildings.

The site defined in the conditions was a very fine one, on the outskirts of the city, approached by a broad boulevard from the south. It consists of sloping ground (capable of grading into plateaux and terraces) on the southern slope of a hill, covered with woods, and rising to a great height towards the north, thus forming a background to the memorial. Below, in the plain at the foot of these hills, stands the city girdled by a river, which the memorial would overlook. The dimensions of the site to be developed were given as not to exceed 1,450 ft. in length by 750 ft. in width, and the average fall was about 1 ft. in 15 ft., but the site was not definitely enclosed on any side but that to the south. The question of whether a commemorative monument should be included as a separate unit or whether it should be combined with the buildings was left to the competitors.

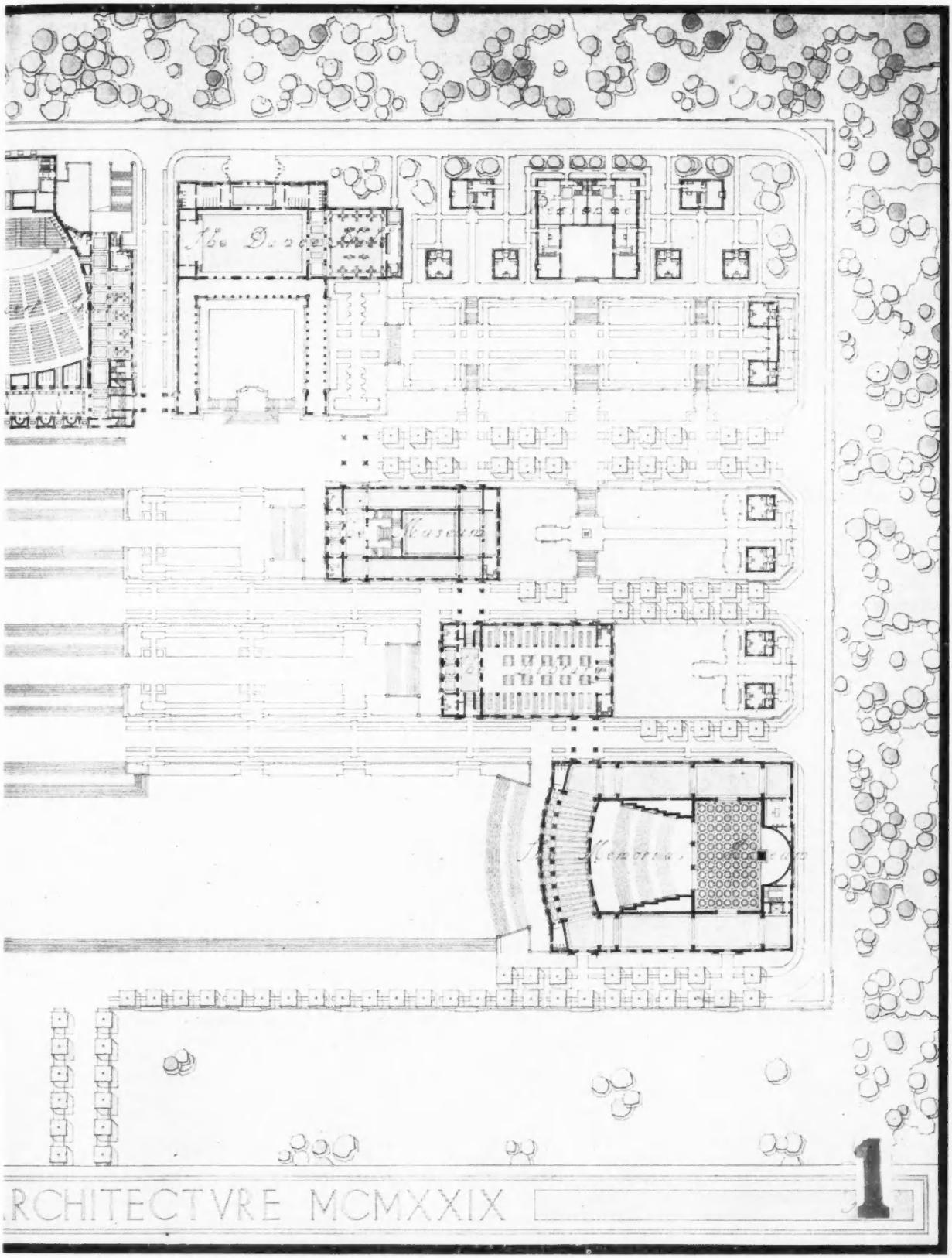
The intention of the competition was to obtain a fine general conception on imaginative and generous lines. It was not intended or expected that detail should be worked out at the expense of composition. This scheme was in a sense a preliminary design in which mass, disposition and character were the qualities which should be pre-eminent. The greatest latitude was left to the competitors and nothing in the drafting of the programme was to be taken as suggesting any arrangement of the various units. The accommodation outlined was that to be principally considered, but additional units might be added as the competitor thought fit, and the detail programme could be varied within reasonable limits. The competitors, in short, were asked to present their ideas of how such a scheme might be conceived.

The designs submitted in the final competition will be exhibited at the Imperial Gallery of Art, Imperial Institute, South Kensington, from July 6 to 20.



The Rome Scholarship Winning Design.]

The lay-out of the memorial buildings. The nucleus of the scheme was to take the form of a large concert hall, seating at least 1,500 for operatic performances; and two or three smaller halls with a capacity of about 500 each for recitals of soloists, the composer, a library of



[By James B. Wride.

3,000 persons, with a stage upon which symphonic concerts might be given with full choral effects; a smaller theatre to seat and for chamber music. Other buildings to include a museum of musical art and instruments, and a museum to the memory of musical reference, restaurants, and cafés.

ARCHITECTS' FEES

When should Accounts be rendered?

In our issue for June 19 Karshish, in "The Honeywood File" (publication of which is temporarily interrupted owing to the author being beset with sciatica) wrote: "In dealing with business firms, public companies, corporations, Government offices, and so forth, it is well for an architect to send in claims for fees on account according to the letter of the custom (see R.I.B.A. scale of charges) . . . The case is different when the architect's employer is a private person. There is an etiquette, which directs that when employed by the nobility and gentry, the architect waits until invited to send in an account. This etiquette flatters the architect by dissociating him from commercial activities, and it is a pity for the architect to discourage the sentiment." Following are the views of some prominent architects on this vital, but extremely delicate, question.

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Why should the wretched architect, who almost comes into the category of "swetted labour," be as coy about sending in an account as Karshish suggests he should be? It is true one does not *pay* a barrister, but gives the fee to his clerk; he, however, is in the lucky position of being paid in advance, and does not, like the architect, have to do most of the work before he is entitled to a fee of any sort. It would surely be a super-genteel person who would hesitate to remind a client that his fees are due; thinking of the pretty little ways of his doctor, lawyer, and accountant, the client would expect a bill, and if he did not get one, would probably not mention the matter until it was very much overdue. In the meanwhile, the knowledge that his overdraft is rapidly reaching the "elastic limit," adds yet another load to the already overburdened shoulders of the architect.

GRAHAME B. TUBBS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Mr. I. C. Cashdown in his letter in your issue for June 26 very rightly challenged Spinlove's apologetic request for fees and Karshish's old-fashioned comments.

There should be uniformity in asking for fees, no matter whether the client is a corporation or a private person. But I have always held that for an architect to ask for a payment on every certificate is carrying commercialism too far, especially when the contract stipulates for monthly certificates.

The public expect quarterly bills from substantial people, such as gas companies, dentists, doctors, and tailors. Monthly payments are practically C.O.D. The wording of the R.I.B.A. scale is really too vague. I should like to see "quarterly" substituted for "payable by instalments from time to time."

HASTWELL GRAYSON

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—It is news to me to learn from Karshish that an architect ought to wait to be asked to send in an account for his fees, and I do not propose to follow his advice in the future, for if I did I don't know where I should find myself. My usual practice, which hitherto I understood was the practice of the profession, is to ask for the payment of half fees when the contract is let and to wait until the job is finished before sending in an account for the balance. But when I have been short of money I have not hesitated to ask a client if he could let me have something further on account. Personally I prefer to ask a client than to write a letter. This is because I find it easier to be diplomatic when speaking than writing. I don't see how any architect who is not very well off could possibly follow Karshish's advice.

A. W. K.

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I think all architects read Karshish with delight and interest. Probably most of them will have shared the shock I experienced on reading in his footnote to "The Honeywood File" that it was contrary to the best practice to send in an account for fees until called upon to do so.

I must admit that only for a moment did my conscience trouble me on my past procedure in this respect. For some reason or other my mind leapt back to an old friend who was so disgusted at a shabby trick a commercially-minded client had played on him, that he resolved to get his own back by not sending in an account at all.

It is good to read of these charming people, but in this age of wickedness, ignorance, and forgetfulness I fancy that the Karshish precept could only be followed by those who are blessed with a sturdy private income.

I see no reason why architects should be in a different position to other professional men. The doctor, the lawyer, and as far as I know all others, send in their accounts at regular intervals, and there is no conclusion drawn that they are "over the fence and do not know what is what."

The only one case I can think of where the payment of fees is thought by some people to be a nerve-wracking procedure is that of the medical consultant. In these days the trouble has been overcome, I believe, by a secretary who collects the fee on the way out. But a few years ago many patients too shy to hand the fee directly to the great physician would hide it somewhere in the consulting-room, leaving him to make a rapid search to ascertain that the amount was correct before the hall door shut.

The practice among architects varies, I believe, and it would be interesting to hear all the variations. The two I know are: 1: to send in an account for, say, two-thirds the percentage on the contract sum at the signing of the contract and the balance on the issue of the final certificate; 2: to send an account for the full percentage on the amount of each certificate as issued.

DELTA

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—It is an interesting point that has been raised by Karshish in his articles under the title of "The Honeywood File," where he refers to the application of the architect to his titled client for fees on account.

It becomes so much a personal matter in dealing with a private client, that it is almost impossible to lay down any hard and fast rule. If one could act strictly in accordance with the recommendations in the R.I.B.A. scale of charges, it would oftentimes be more just to the professional adviser, but it might result in a somewhat strained relationship with a particular kind of client.

It is always difficult to change what has become a custom, and an unwise action for any one individual, unless the confidence hitherto existing between the professional man and his client no longer exists.

It is obviously most unfair for an architect to be expected to wait for his fees according to the pleasure of his client, particularly when one realizes that a great deal of his time and money is spent on his designs and working drawings before the various contractors begin operations. These contractors demand to be paid a percentage of their costs as the work proceeds, which is sound business. Is there any justification because an architect does not claim to be a business man, but prefers to be called an artist, that he should be penalized for this privilege?

STANLEY HAMP



ENGLISH PRECEDENT No. 71

DETAIL OF WINDOWS AND BALUSTRADE, BASEMENT STORY, SOMERSET HOUSE, LONDON.

Sir William Chambers was a master of surface adjustment. There is no task more difficult in classical work than to combine windows of unequal shape. The problem at Somerset House was to maintain the character of a public building in terms of Roman detail. In this regard Chambers was most successful. The mezzanine window rides naturally upon the more important ground-floor opening. The wall surface, chequered with rustications, emphasizes the scale of the ordonnance above the balustrade.—[A. E. RICHARDSON.]



The Old Crown, Bookham. A blind corner, upon which the old premises stood, has been removed, and the new building has been designed with an ample forecourt to fit the corner site.

OLD CROWN, BOOKHAM : FOR A SURREY BREWERY : KING'S ARMS KINGSTON

DESIGNED BY JOSEPH HILL



The entrance to the saloon bar and luncheon-room of the Old Crown, Bookham. To the left is seen a corner of the tea loggia, and above are the three windows of the club room.

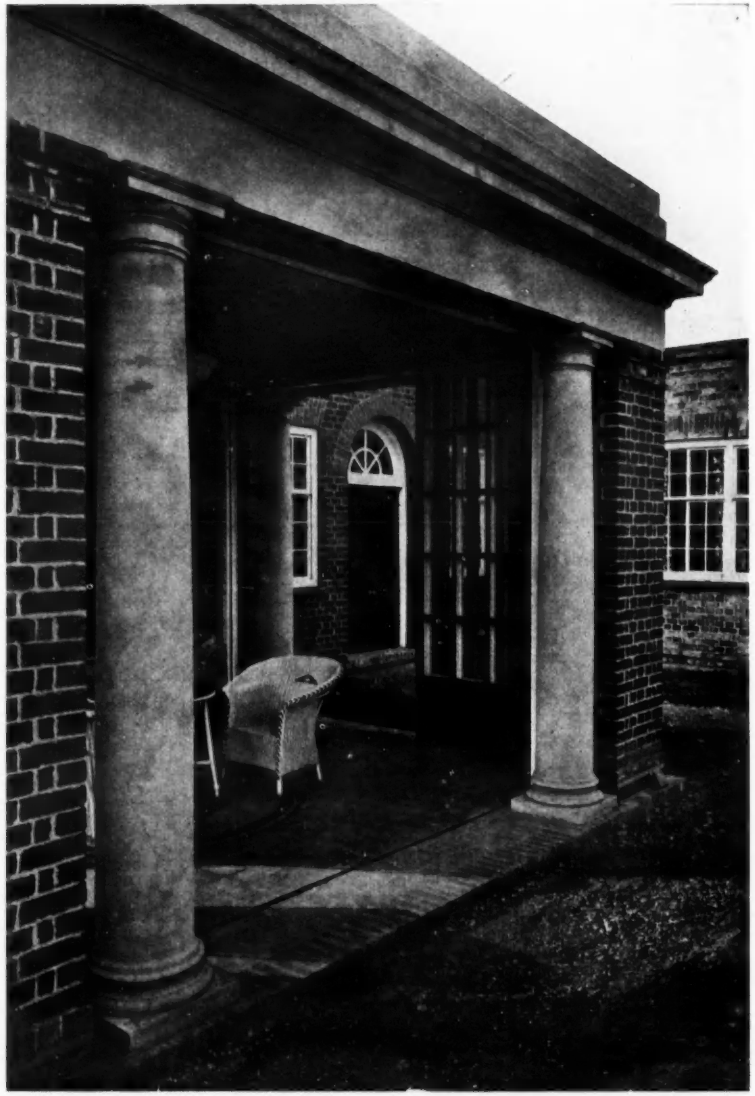
THE two new public houses illustrated on this and the following three pages have been built for Messrs. Hodgson's Kingston Brewery Co., Ltd. In each case, in erecting the new house, the opportunity has been taken to effect an important street improvement.

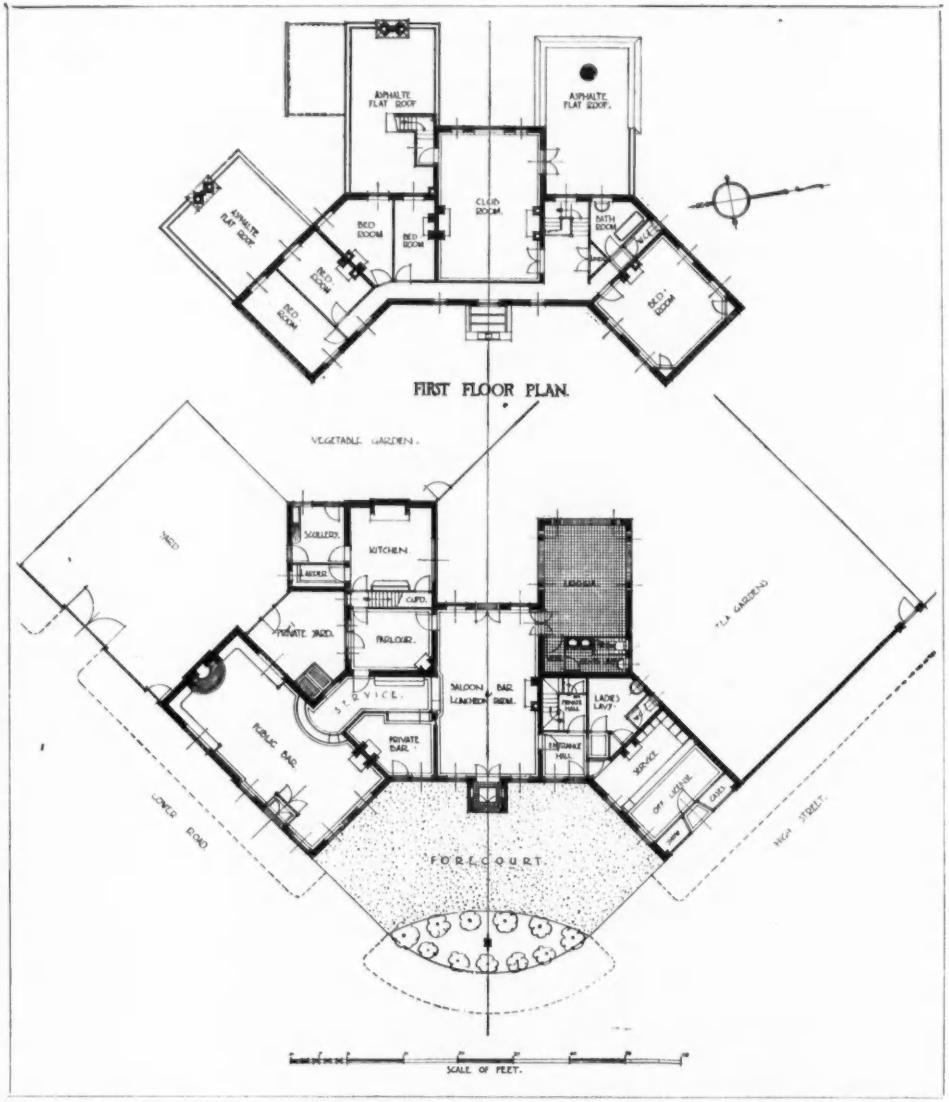
At Bookham the old building formed a blind corner at the junction of Lower Road and High Street. This has now been removed by the incorporation of a forecourt in the lay-out of the new premises. At Kingston the old structure projected about 25 ft. beyond the present building line into Clarence Street and was a serious obstruction to traffic.

Immediately facing the forecourt at Bookham is the entrance to the saloon bar and luncheon-room, the doorway of which has been accentuated and made the central architectural feature of this, the main façade. To the left of this doorway is the entrance to a small private bar and to the right the entrance hall. The saloon bar and luncheon-room extends the complete width of the building, and opens at the back on to the tea gardens and the tea loggia. In size the next most important unit of the ground-floor plan is the public bar, entrance to which is obtained from Lower Road. In the right-hand wing and entered from High Street is the off-licence. On the first floor is a clubroom and five bedrooms.

The building is faced with 3 in. hand-made red bricks, and has brick heads and arches of red rubbers, brick treads

(*Concluded on page 24*)

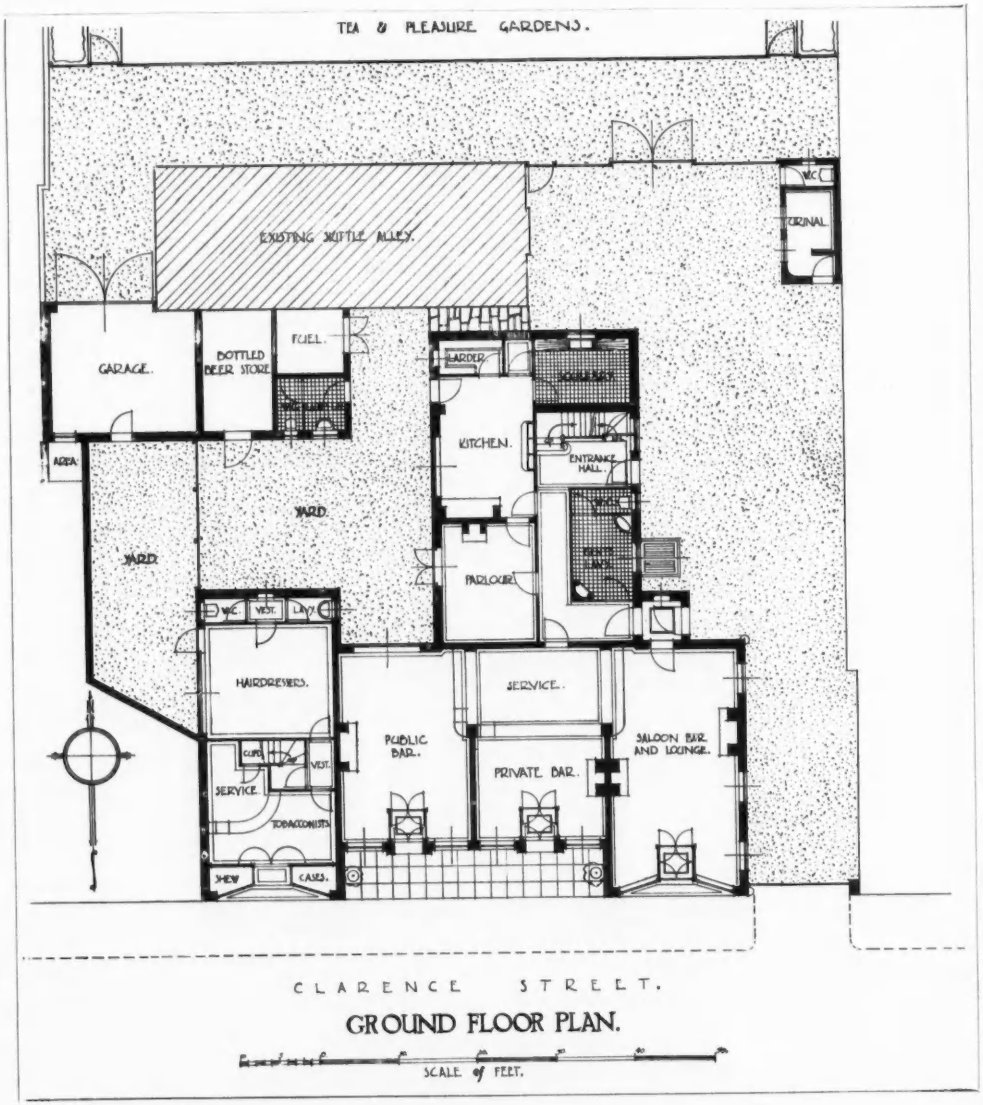




The Old Crown, Bookham.] *[By Joseph Hill.*

The tea loggia, looking from the tea garden towards the garden entrance to the saloon bar and luncheon-room ; and the plans. The walls are faced with 3-in. hand-made red bricks, and the heads and arches are of red rubbers. The columns and cornice are of artificial stone. The floor of the tea logia is tiled and the steps are of brick.

The floor of the tea loggia is tiled and the steps are of brick.





[By Joseph Hill.

The King's Arms, Kingston.]

The ground-floor plan and the entrance to the saloon lounge. The first-floor plan, and general view of the main front, appear on page 24. The bars occupy the road frontage and are grouped round a central serving space.¶ This is adjacent to the private part of the house, thus separating the accommodation for the licensee from that for the public. In one wing of the building is a hairdresser's and tobacconist's business.



The King's Arms, Kingston-on-Thames.] [*By Joseph Hill.*

Walls are of brick, with stone dressings, and red rubbers to doors and windows. Wall Tablets are in red rubbers, the lettering cut direct and treated with gold leaf.



When the King's Arms, Kingston-on-Thames, was erected an important street improvement was effected. The old building projected some 25 ft. beyond the present building line, and was a serious obstruction to traffic.

and steps, metal windows; and other architectural features in artificial stone and terra-cotta.

At Kingston the public bar, saloon bar, and lounge are entered from Clarence Street and are grouped around a central serving space. This is adjacent to the private part of the house, and separates the accommodation for the licensee from that for the public. Behind the building are a skittle alley, and tea and pleasure grounds. On the first floor of the licensed premises are a clubroom, a sitting-room, five bedrooms, and a bathroom. The west wing of the main front is let off and adapted as a self-contained unit for the purposes of a tobacconist's and hairdresser's business. On the first floor of this wing, and approached by a separate staircase, are two rooms and a kitchenette.

With the exception of stone dressings, the whole of the wall surfaces are in brickwork, the front and east elevations being of 2 in. hand-made multi-coloured bricks, with red rubbers to doors and windows. A warm, hand-made tile is used on the roof. The four wall tablets are in red rubbers, with the lettering cut direct into the brickwork and treated with gold leaf.

SHADOW PROJECTION

A Holiday Course for Architectural Students: v

BY JOHN M. HOLMES

In preceding lessons a method of obtaining shade lines and cast shadows is described which is practicable for all forms. But in all cases both elevation and plan have been necessary. Familiarity with shadow projection will show that in many cases it is not necessary to project from a plan. Shadows may be readily worked on the elevation alone, and slicing may be avoided in dealing with discs, spheres, etc. The following typical deductive methods may be memorized and applied in particular cases as opportunity occurs. The forms are similar to those used previously, so that the methods may be compared.

Diagrams 5-9: Shadows of Simple Forms on Plane and Irregular Surfaces

SHADOW OF A CUBE ON A VERTICAL SURFACE WITHOUT PLAN (OR ON A HORIZONTAL SURFACE WITHOUT ELEVATION)

DIAGRAM 5. The elevation of a cube ABCD and the distance BP between the cube and the vertical plane of the shadow surface are given. The method of obtaining the shadow of the cube is as follows. Draw diagonals AE and BF of indefinite length. From P draw a vertical line downwards of indefinite length. The points N and T will indicate the position of the two squares which are the shadows of the front and rear faces of the cube. The diagonal UX completes the outline of the shadow.

(If the page is rotated so that its left side becomes the lower horizontal edge, the square ABCD may be regarded as a cube in plan, placed the distance BP above the horizontal shadow surface, and the plan shadow be drawn as shown without reference to an elevation.)

SHADOW OF A RECTANGULAR PRISM ON A VERTICAL (OR HORIZONTAL) SURFACE

DIAGRAM 6. In the case of a rectangular prism, the shadow of the rear face is obtained by setting the given distance BP of this face from the shadow surface along a continuation of the line AB, as in diagram 5. PX is the given depth of the prism from back to front, and these points are projected downwards on to the diagonals as before. The method may be developed on the lines indicated in the preceding example, in brackets, for casting shadow outlines of all prismatic forms.

SHADOW OF A VERTICAL ROD ON AN IRREGULAR FORM

DIAGRAM 7. The front elevation of the shadow of the rod MJ, beginning at the point BD, will be the same as the vertical section outline of the form on which the shadow falls. The distance AD—BD in the elevation will be equal to the actual distance of the rod from the moulding at that particular level, viz. AB in the section. The horizontal shadows on the moulding will obliterate certain parts of the shadow of the rod. The position of these shadows is determined by drawing lines at 45 deg. to the section, as at EF. Point F is then projected horizontally to the front elevation. If the front elevation be regarded as a plan, the shadow of the rod would again be a true section of the moulding, as shown, but the horizontal shadows on the moulding would be projected by plan rays at 45 deg. Such plan rays would be at right angles to those drawn in the section.

SHADOW OF A HORIZONTAL EDGE ON A VERTICAL MOULDING

DIAGRAM 8. The shadow outline of the straight edge EF of the projecting horizontal member in this elevation on to the irregular surface of the form below is a reverse section of the form as shown in the plan and may be so drawn without projection. CD is the distance of projection of the horizontal member at that particular part. The shadow of the straight edge EG on the left in plan is a straight line E—ES at 45 deg. in elevation, although it falls on the irregular surface. The portion of the line X—ES is not required, as the surface at this part is illuminated. The width of the vertical strips of shadow in the elevation are found by projection at points A and B.

SHADOW OF A HORIZONTAL DISC ON A VERTICAL SURFACE (WITHOUT PLAN)

DIAGRAM 9. The line AB represents a disc in elevation. CD is the given distance of its centre from the vertical surface on which its shadow is to be cast. From D a vertical line is drawn downwards so as to cut the two diagonals AT and BR at Q and T. Horizontal lines are then drawn through these points. The parallelogram so produced will enclose the ellipse of shadow. The diagonal PR of the parallelogram is next drawn and produces its centre point CS. Axial lines FH and EG are drawn through CS. E, F, G, and H are four points in the ellipse of shadow. To obtain other points in the ellipse mark off the length of half the short diagonal QT on to the long axis FH, one ither side of CS, thus obtaining points W and K. Draw horizontal lines through these points to obtain L, M, N, and O on the diagonals. L, M, N, and O are four more points in the outline of the ellipse of shadow.

(See overleaf for diagrams.)

ANNOUNCEMENTS

Mr. Raymond Unwin, F.R.I.B.A., has been elected honorary corresponding member of the American Institute of Architects.

Mr. George A. Allan, architect and surveyor, has moved his office to No. 8 Gray's Inn Square, W.C.1. Telephone number: Chancery 7924.

Messrs. Murray, Delves and Murray, architects, are moving their Eastbourne office to No. 13a Enys Road, Eastbourne. Telephone Number: Eastbourne 3155.

The Minister of Health, the Rt. Hon. Arthur Greenwood, M.P., has appointed Mr. A. Nevil Rucker to be his private secretary, and Mr. P. N. R. Butcher to be his assistant private secretary.

The Standing Committee (General Merchandise) appointed by the Board of Trade will hold an inquiry at 11.30 a.m. on Monday, July 8, as to whether imported asbestos cement products should bear an indication of origin. If necessary, a further meeting will be held on Tuesday July 9. The inquiry will be held at the Board of Trade Offices, Great George Street, London, S.W.1. Communications should be addressed to the secretary, Mr. E. W. Reardon, at that address.

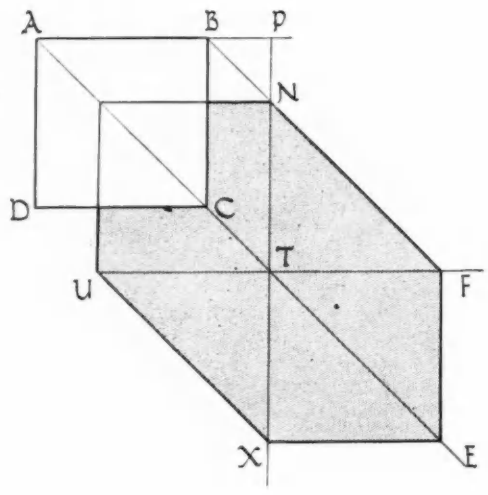


DIAGRAM 5.

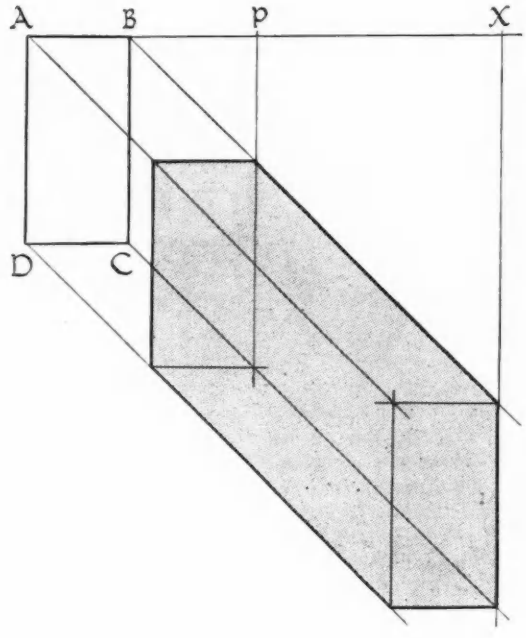


DIAGRAM 6.

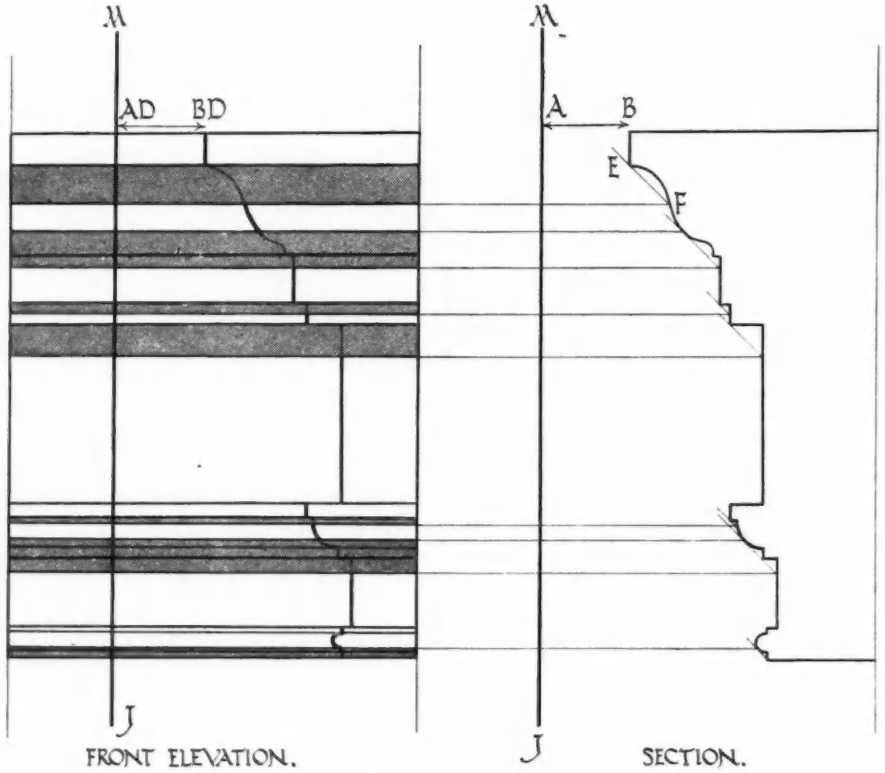


DIAGRAM 7.

Shadow Projection] [*By John M. Holmes.*

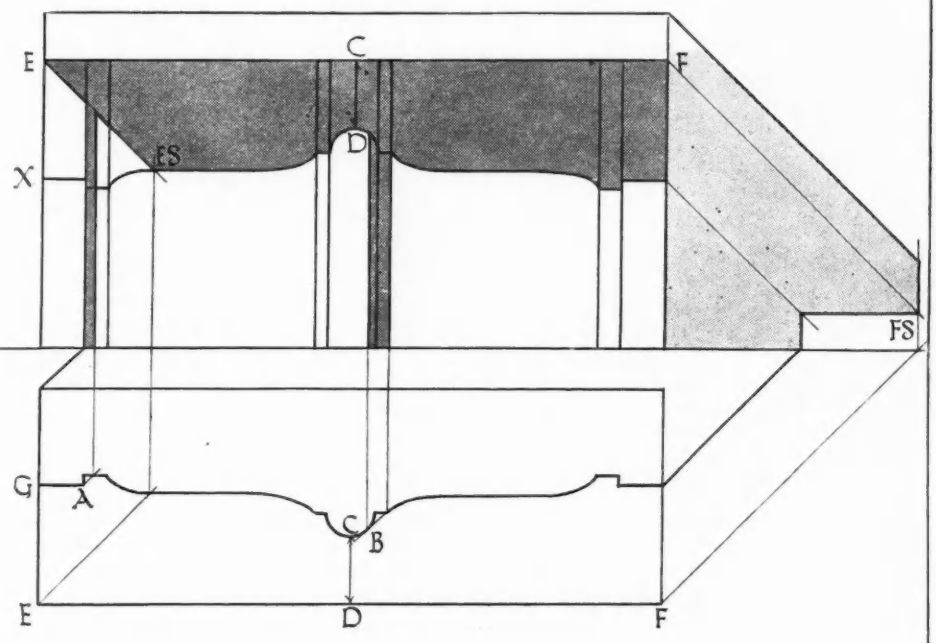


DIAGRAM 8

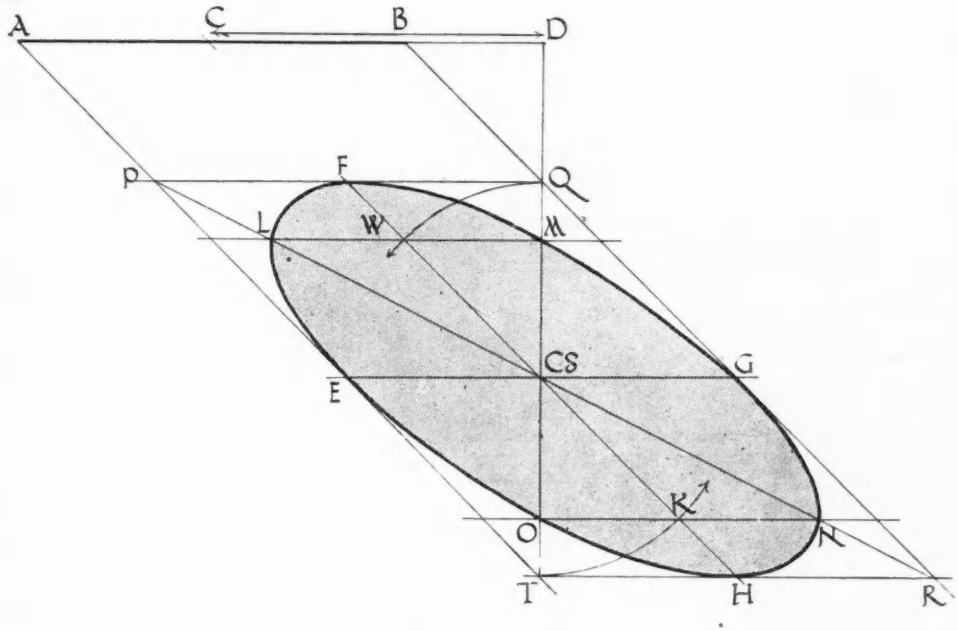


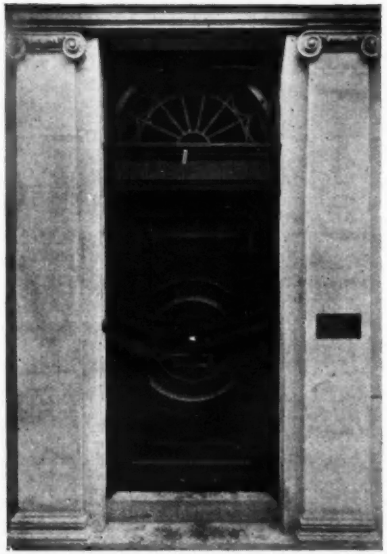
DIAGRAM 9.

Shadow Projection.] [*By John M. Holmes.*



Branch Banks.]

The bank in High Street, Ware, Herts, is designed to conform with the Georgian character of the surrounding buildings. The façade is of brick and artificial stone.



The main entrance to the bank at Ware.



One of the entrances at Southampton.



[*By Septimus Warwick.*

The bank at Southampton stands in a main shopping thoroughfare. Stone, granite, and marble are among the chief constructional materials utilized.

BRANCH BANKS
for
Westminster Bank Ltd.

DESIGNED BY SEPTIMUS WARWICK

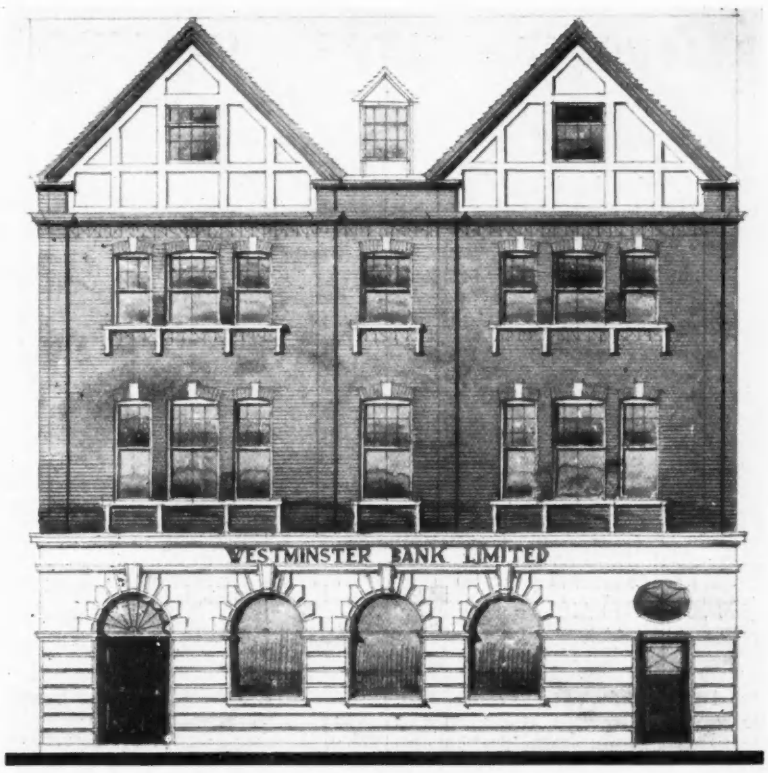
The accompanying illustrations of banks are representative of the various types of branches that the principal banks are now building throughout the country.

That at Ware is in the High Street of a small country town and is designed to carry on the Georgian character of the surrounding buildings.

The Southampton branch is in the main shopping thoroughfare of a commercial city, where it is necessary to have a design of a more elaborate character, and the treatment of the front conforms also to the general architecture of the street.

The Spitalfields Market branch is a type of branch frequently met with in London, being an alteration of an existing building: the bank premises consisting of the basement and ground floor, with a new treatment of the lower stories, leaving the upper stories without alteration.

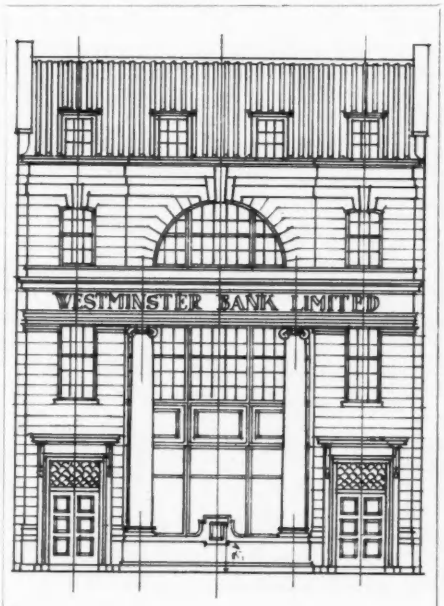
The Watford branch, a drawing of which is hung in this year's R.A. Exhibition, is a new building in a town near London, similar to many others which are rapidly growing around the metropolis. This is a stone building with a Roman tile roof.



The branch in Spitalfields Market will be installed in the ground floor and basement of an existing building. The façade from ground- to first-floor level only, and now under construction, is by Septimus Warwick.



One of the entrances at Southampton. Stone, granite, and marble are among the chief constructional materials utilized.



Two of the architect's drawings of the Watford branch, which has a stone front and Roman tile roof. A drawing of this bank is hung in the Royal Academy this year.

PRIMITIVE DETAIL OF TODAY

BY A. J. PENTY

Plate 20: A Fireplace

From a functional point of view there can be no satisfactory solution of the problem presented by a fireplace, because it so happens that the more efficient it becomes as a source of heat the less it has to say for itself in terms of architecture. We all admire the open fireplace with its brick or tile lining, its firedogs and Sussex back; for it is the type of fireplace that provides the maximum architectural opportunity. But from a practical point of view it is hopeless. The heat goes up the chimney instead of into the room.

For this reason the open fireplace is only used today in a house provided with central heating. In general, therefore, we use a less open type, which restricts our opportunities for design.

If we do the really scientific thing and adopt central heating, architectural opportunity entirely disappears.

We are not likely, I think, in this country to surrender the fireplace to the demands of science, for there is another side to this question. An open fire not only provides heat, but is "company."

The plate shows a new way, as far as I know, of treating a well fire, if we may use the term in its generic rather than trade sense—for the actual section of the fireback is that of a Devon fire.

The risen hearth with a fire in a hole is, I feel, architecturally wrong. I have therefore kept the hearth at the floor level, while I have raised the fire itself 3 in. or so above it. Then, instead of lining the recess with bricks or glazed tiles I have built it with roofing tiles, and have used for the arch and the hearth Klompje bricks, which I prefer to the English fireplace bricks, because of their smaller size. Being only $5\frac{1}{8}$ by $2\frac{1}{4}$ by $1\frac{3}{8}$ in. they give a better scale. The surround is made of unpolished Hopton Wood Stone, 1 in. thick.

The joints should be flush, the mortar should be brown in colour and sufficiently dark to prevent the tiles from being too conspicuous. The only satisfactory way of getting this colour is to use a dark sand; for it is not advisable to put colouring matter in the mortar since it makes it liable to crumble. In exactly what proportion the sand and lime should be mixed it is impossible to determine, except by experiment, as it depends upon the colour of the sand. In the event of the joints drying out too light—of which there is considerable danger, as it is difficult to judge from samples exactly what the colour should be—the situation can be saved by using a thin grout of mortar to tone down the tiles. Indeed I am inclined to think that with small fireplaces this should always be done, for the contrast in colour between the tile and mortar which is perfectly satisfactory on a large scale is not satisfactory on a small one.

The risk of failure can be reduced by the use of joints thinner than it is customary to use. Hitherto I have been accustomed to use $\frac{1}{2}$ in. joints, but I think in the future I shall make them only $\frac{3}{8}$ in. thick—that is, for the tiles. The joints in the arch should be as small as possible.

If such a fireplace is to be carried successfully into execution it will be necessary to supply not only a general drawing to inch scale and full sizes of the stonework, but a drawing half full size, showing every tile and every joint, with ample notes. Nothing should be left to chance, for if it is possible for the workman to make a mistake it is certain to be made. For instance, it is not sufficient to draw an arch showing bricks to radiate. It is necessary to put a note on the drawing to say that the bricks are to be cut; otherwise they will not be cut and the joint will be wider at one end than the other.

It will be observed that this is a fireplace without a chimney-piece. The chimney-piece is a Renaissance feature. Its omission will give a room a more primitive feeling.

[This series of plates is now concluded. The previous instalments appeared in our issues for January 2, 16, 30; February 13, 27; March 13, 27; April 10, 24; May 8, 22; June 5, 19.]

A UNIQUE DRAWING OF ST. PAUL'S

Collotype reproductions of an isometric drawing of St. Paul's Cathedral, by R. B. Brook-Greaves and W. Godfrey Allen, are being published by The Architectural Press on July 9.

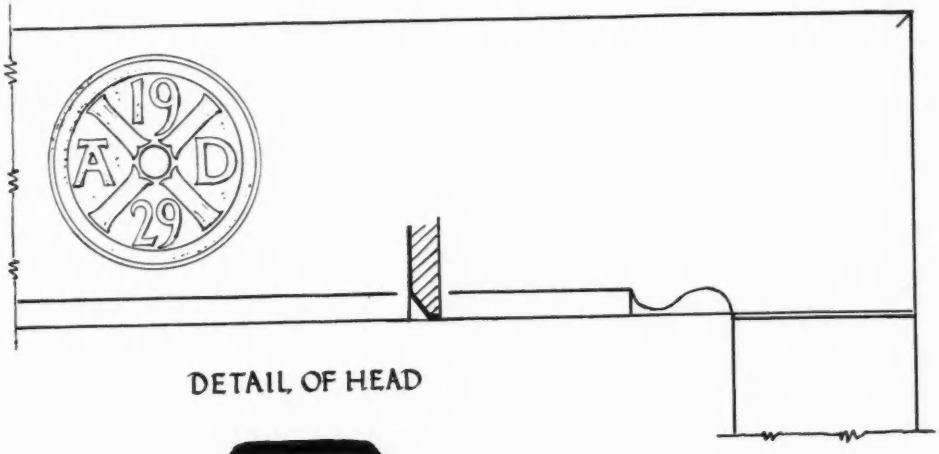
The drawing itself is probably the largest and most important that has ever been made of any building in the world (it measures approximately 12 ft. by 8 ft.), and its history is a remarkable one. The idea of laying bare the construction of the cathedral by an isometric drawing originated in 1907 with Mr. William Dunn, F.R.I.B.A., who set out the lantern and ball and cross. The drawing was later carried farther downwards to embrace the dome by Mr. Matthew Dawson, F.R.I.B.A. In 1922 Mr. Mervyn Macartney, F.S.A., surveyor to the fabric, determined that this method should be extended so as to show not only the dome, but as much of the rest of the cathedral as possible, and he commissioned Mr. R. B. Brook-Greaves, in collaboration with Mr. W. Godfrey Allen, to prepare an entirely fresh drawing on a far larger scale than had previously been contemplated, commencing with the foundations and working upwards. After many years of constant labour the new drawing has at last been completed, and every detail of the construction of this famous building has now been made clear for the first time in its history.

Mr. Walter Tapper, A.R.A., writing of the drawing, says: "It is the result of years of labour spent in investigating the exact methods of constructing the building, and in demonstrating these in a manner that the architect and layman can appreciate, although only experts can realize the patience and perseverance that such a work has involved. The drawing is a novel way of placing before the modern student the scientific methods which Wren employed to carry his dome by means of masonry on to the eight great piers . . . a unique drawing which should last for all time, both as a study in the construction of a great design, and as an example of masterly architectural draughtsmanship for students to follow.

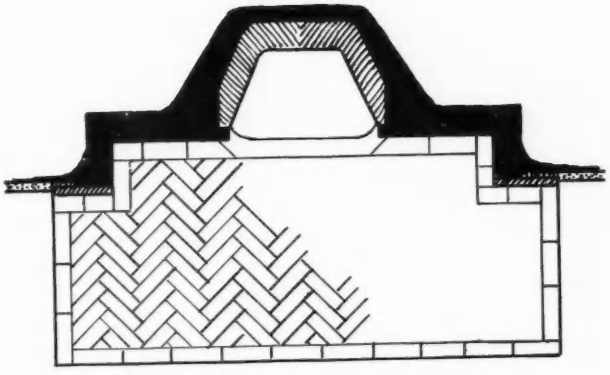
It may be confidently assumed that copies of this drawing will be found in every architectural school and technical library in the world, and in the possession of everyone interested in constructive architecture and fine draughtsmanship."

The drawing is being reproduced to a size of about 48 in. by 32 in. on a fine cartridge paper mounted on cloth, and will be offered for sale at the price of 30s. per print. It can also be obtained at the same price in four sections unmounted (measuring about 25 in. by 17 in. each) by those who would prefer to possess the drawing in this form. In addition to the ordinary edition there will be a small edition de luxe printed on hand-made paper, and limited to fifty copies, each of which will be numbered and signed by Mr. Mervyn E. Macartney, surveyor to the fabric of St. Paul's Cathedral. The price of this edition will be £3 3s. Orders may be sent to any bookseller or direct to the publishers, The Architectural Press, 9 Queen Anne's Gate, Westminster, S.W.1.

PLATE 20



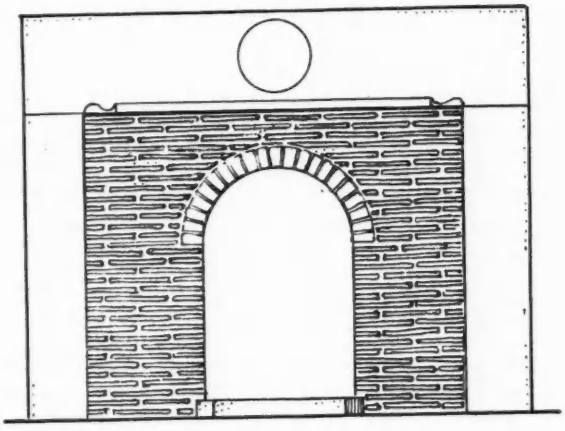
DETAIL OF HEAD



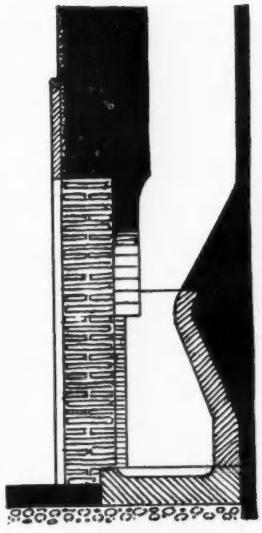
PLAN



PLAN THRO' JAMB



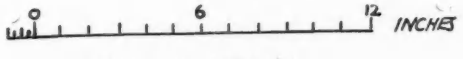
ELEVATION



SECTION



SCALE FOR GENERAL DRAWING



SCALE FOR DETAILS

LAW REPORTS

WARRANTY: "A WELL-BUILT HOUSE"

Prydderch v. *Griffiths. Divisional Court of King's Bench. Before Justices Swift and Mackinnon*

The point raised in this appeal, which was by the defendant, Mr. Griffiths, a builder, of Wrexham, against a judgment of the county court judge at Wrexham, in favour of Mrs. Gertrude Prydderch, of Wrexham, was whether a statement about a house the defendant was selling to the plaintiff that it was a well-built house and not a jerry-built house, was a warranty that should be read into the contract that was afterwards entered into between the parties.

Mr. W. Lyon Blease, for the appellant, stated that his client built a house at Wrexham, which he sold to the respondent for £1,250. Before the contract was signed Mrs. Prydderch said to him in the presence of her brother, Mr. Kingston, who was an estate agent, "We have heard that these houses are jerry-built. Are they jerry-built?" and the appellant replied, "Oh, no, I will guarantee that this is a well-built house and not a jerry-built one." After the purchase, however, dry rot appeared in certain woodwork, and £58 was spent by the purchaser in repairs. The question now arose whether that guarantee was a collateral warranty that should be read alongside the contract to make the builder liable, and the county court judge found it was. Counsel contended that the guarantee was no part of the contract and was merely an innocent misrepresentation.

The Court dismissed the appeal, with costs, without calling upon Mr. Vaisey, K.C., for the respondent. They held that there was ample evidence on which the county court judge could arrive at the conclusion that the appellant contracted that the house in question was a well-built house.

CLAIM FOR BREACH OF AGREEMENT

Quirk v. *Moseley. King's Bench Division. Before Mr. Justice Roche*

This was a claim by Mrs. Eugenie Maria Quirk, of Pont Street, Sloane Street, against Mrs. Kathleen Isabel Moseley, of the Ladies' Park Club, Knightsbridge, for damages for breach of agreement to rent plaintiff's flat at Pont Street from April to December 1928 for £266.

Mrs. Moseley alleged that she found beetles in the flat and when one was discovered in her bed she at once left. She had paid half the contracted rent in advance.

Mrs. Quirk said there were no beetles until the February before Mrs. Moseley came in, and they appeared as the result of hot-water pipe reconstruction in a neighbouring flat. She engaged a pestologist, who got rid of the beetles.

Mr. Thomas Howard, a pestologist, said he saw only forty or fifty beetles on his first visit and after treatment none were seen on the second and third visits. A few eggs might be the starting point of a rapid multiplication by the progeny, which laid eggs four or five times a year.

The defendant gave evidence that she one day saw a great number of beetles coming from the wainscoting in the dining-room, on another saw three near the washstand, and immediately left when she found a beetle in her bed.

His lordship said there might be a certain number of beetles in any premises in London of the same date, but that did not justify the defendant in breaking her contract. He was satisfied there was not in this house a great quantity of beetles and that the plaintiff had represented the true facts. He thought the defendant really did not wish to continue to live in the flat as the end of the London season had arrived. He entered judgment for the plaintiff with costs for £92 19s. 3d.

HOUSING ACT, 1925: SLUM CLEARANCE

London County Council v. *Abrahams. King's Bench Division. Before Mr. Justice Shearman*

This action related to the possession of premises required for a slum clearance scheme of the L.C.C. at Spitalfields. The Council sought possession from the defendant, Mr. Hyman Abrahams, of premises occupied by him as a residence and business of a tailor at 60 Bell Lane, Spitalfields.

Mr. Rowland Thomas, for the Council, said the defendant held the premises under a twenty-one years' lease, which expired in March 1928. One of the Council's slum clearance schemes was being held up by the defendant remaining in possession. Defendant had declined the alternative accommodation offered and there was none now available. The proceedings were brought under the Housing Act, 1925.

Mr. Gallop, for the defendant, argued that there was no machinery which permitted the Court to say the Council had any right to take possession as a local authority. A local authority who happened also to be landlords must either acquire the property under the provisions of the Housing Act with the consequential right of the occupier to claim compensation under the Act, or else the authority could claim as a landlord against the tenant when the tenancy expired. If they chose to claim as landlords the defence of the Rent Acts was a good one and the tenant was entitled to the protection of the Acts. It was only if they proceeded under the Housing Act by serving the prescribed notice and otherwise fulfilling the conditions of that Act, that they were in a position to plead that the tenant could not say that the Rent Act protected him.

His lordship, after hearing the evidence of Mr. W. J. Liberty, principal assistant in the L.C.C. Valuer's Department, gave judgment for possession with £87 for use and occupation, with costs. He said the plea of section 5 of the Rent Act, 1920, was, on the face of it, a good defence, but then there came the Housing Act of 1925, which practically said that when it came to slum clearances, the Rent Act should not be allowed to stand in the way. Plaintiffs had acquired the reversion of the premises and had done all they could to help defendant. The plaintiffs had satisfied him as to their right to possession.

THE AMENITIES OF PROPERTY

Stevens v. *Graham and another. King's Bench Division. Before Mr. Justice Mackinnon*

This was an action by Mr. Charles Stevens, a gardener and specialist, of Christchurch Mount, Epsom, against Mr. J. Graham and Miss Ethel Graham, to recover damages in respect of injury to a hedge which formed a boundary to his land.

Mr. P. B. Morle, for the plaintiff, stated that his client purchased a plot of land from the defendants. He did so because there was a particularly fine deep hedge on one side which would form a natural boundary, and subsequently he erected a house there. Plaintiff's complaint was that on the instructions of the defendants, the hedge had been severely cut and the trees lopped, and that it would cost a considerable amount to reinstate, while the effect of what had been done had seriously depreciated the value of his property. Boys came in through the gaps in the hedge after fruit, and plaintiff suffered damage in other ways.

Mr. Monckton, for the defendants, said his clients had acted with the full knowledge of the plaintiff, who raised no objection at the time. He submitted that the damage, if any, was too remote and could not be recoverable.

His lordship, after hearing evidence, said the dispute was an unfortunate one, but he thought that the defendants had been guilty of a breach of covenant. Under those circumstances he assessed the damage at £30, and gave judgment for plaintiff for that amount, with costs.

CANAL BRIDGE: DISPUTE AS TO MAINTENANCE

Great Western Railway Co. v. *Monmouthshire County Council. Court of Appeal. Before the Master of the Rolls and Lords Justices Lawrence and Russell*

This appeal raised a point of interest in regard to the cost of maintenance of a bridge over a canal. The Great Western Railway appealed from a judgment of Mr. Justice Maugham, sitting in the Chancery Division, in favour of the Monmouthshire County Council. In the Court below, the railway company sought a declaration that the Council were bound to maintain and repair a bridge over the Monmouthshire Canal at Newbridge so as to provide a headway of not less than 6 ft. between the arch of the bridge and the towing path of the canal, and for specific performance of an agreement dated October 10, 1911, that the defendants were bound to keep the bridge at a height of 6 ft. above the towing path so as to admit of the proper and reasonable use of the path and the proper navigation of the canal. The defendant Council said they had at all times well and sufficiently maintained and repaired the bridge, but denied they were required by the agreement in question to maintain a headway of 6 ft. or any headway at all above the towing path. If the headway prevented the proper navigation of the canal they said they were not responsible because it was due to subsidence in mines over which they had no control.

Mr. C. E. Jenkins, K.C., stated that in the Court below the learned judge said that it was impossible for him to come to the conclusion without any reasonable doubt that the parties intended to impose on the County Council a positive obligation to raise or jack up the bridge and the approaches whenever, as the result of mining operations, the bridge got into such a position that it did not admit of the reasonable and proper use of the towing path. The action therefore failed and he dismissed it. Counsel contended that the learned judge had arrived at a wrong decision in the case.

The Court, without calling upon Mr. St. John Micklethwaite, K.C., for the Council, dismissed the appeal, with costs.

The Master of the Rolls agreed with the learned judge in the Court below that it was not intended to impose on the Council the obligation to raise or jack up the bridge and approaches whenever, as the result of mining operations, the bridge got into a position so as not to admit of the reasonable and proper use of the towing path. He thought that to hold otherwise would be to put a wrong interpretation on the word "maintain" in the agreement of October 1911.

The Lords Justices concurred.

READERS' QUERIES

SERPENTINE GARDEN WALLS

M. W. writes: "I have heard of old walls, constructed on plan in a series of curves, of only 4½ in. thickness, but I have never seen one. Can you tell me how the curves are set out?"

A serpentine garden wall is occasionally to be found in mid-nineteenth-century gardens. It is built of 4½ in. brickwork, which would resist little wind pressure if built straight on plan, but which is remarkably strong if built in curves. My recollection is that the curves cut a centre line about every 15 ft., and are about 2 ft. deep. Such walls are found built in long lengths in exposed situations, without any piers, except those at which they start and finish. One I have in mind is over 7 ft. high. The chief object is economy of brickwork, but gardeners think they protect fruit trees and secure more sunshine for them than a straight wall would; possibly this is true of some aspects.

N. L.

LIME WASH AND TALLOW FINISH TO CEMENT RENDERING

C. R. writes: "I wish to specify a lime wash and tallow finish to the outside cement rendering of a house. Can you give me a reliable recipe as regards durability, protective qualities, and good finish when dry?"

I have used the following recipe which complies with C. R.'s requirements so long as rough bricks, such as London stocks and lime mortar, or floated cement face thoroughly dried out are the base. It will not endure a Fletton brick or smooth-trowelled rendering, on which a preliminary wash of cement slurry should be given. Place one bushel good *fresh* lime in a barrel with 20 lb. beef tallow; slake with hot water, and cover with sackcloth to keep in steam. When the lime is slaked the tallow will have disappeared, having formed a chemical compound with the lime. Dry colours may be added before slaking the lime, to produce any desired tint. Thin to easy-flowing consistency with clear water.

E. G.

The Editor welcomes readers' inquiries on all matters connected, directly or indirectly, with architectural practice. These inquiries are dealt with by a board of experts, to which additions are constantly being made as, and when, need arises. No charge is made to readers for this expert service. Diagrams must be clearly and legibly drawn out and lettered in black ink. Querists must enclose name and address.—Ed. A. J.

WATER SUPPLY TO A CHURCH

R. E. writes: "I am erecting a church and hall upon a site about 80 yds. from a main thoroughfare. This site abuts on to a road at right angles to the main thoroughfare. No water main has been laid in the latter road, and I asked the local authority to put one in. They replied saying they would put in a 3-in. main if we bear 50 per cent. of the cost. Is this a usual or regular proceeding? All we require is a ¾-in. or 1-in. supply pipe from the main, and if a 3-in. main is put in along the existing road (for which they ask us to pay half cost) this will become a public main."

This case is one of considerable difficulty. It is not stated whether the road is a public or a private roadway, or whether there are local Acts regulating the costs of supplying water to the ratepayer.

In the absence of this data it is impossible to express a final opinion. The leading case is the Lancashire Rural Council *v.* Ogilvy (1899) 1.Q.B., which sets forth the principles of law with clarity. The effect of the decision in that case is that if a supply of water is laid on within a reasonable distance from the property, then the cost of bringing a supply of water to the property is regulated by section 62 of the Public Health Act, 1875, which does not limit the expenses but allows a right of appeal, if the ratepayer is dissatisfied.

On the other hand, if the water supply is not within a reasonable distance of the property, the cost of bringing it to a point which may be deemed a reasonable distance is regulated by section 3 of the Public Health (Water) Act, 1878, and which in that case limits the expenses.

It is a matter of fact, rather than of law, as to whether the water supply at the present time is within a reasonable distance of the property, and on this point I am not competent to express an opinion on the matter.

The advantage of allowing other ratepayers to use the pipe is that the cost of the upkeep of the pipe falls upon the local authority, and not upon the church, whilst if it were a private pipe and not a public one, the cost of the upkeep of the pipe would fall to the owner thereof; in this case the owners of the church and hall.

It should be stated that section 62 of the Public Health Act (1875) contemplates the existence of a local Act dealing with the cost of providing a water supply, and reference should be made of the local authority to see whether there is a local Act in existence dealing with the matter.

E. F. I.

SOCIETIES AND INSTITUTIONS

LEICESTER SOCIETY OF ARCHITECTS

At the fifty-sixth annual general meeting of the above Society the following officials were elected: President, Mr. Walter Brand; council, full members: Messrs. Albert Herbert (F.), E. T. Allcock (F.), W. Keay (F.), A. H. Hind, T. T. Sawday (A.); Associate members: Messrs. W. Cartwright (A.) and A. E. Smith (A.); hon. treasurer, Mr. A. F. Bryan (A.); hon. secretary, Mr. C. F. McL. Keay. Prizes were presented to the following successful students: Messrs. A. E. Goffey, W. J. Hemmings, E. C. Mount, Anthony Herbert, W. K. Shuttlewood, F. Appleton.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS

The annual general meeting of the A.A.S.T.A. was held at the R.I.B.A. Mr. W. H. Hamlyn, A.R.I.B.A., president, was in the chair. Representatives attended from various parts of the country.

The annual report and balance sheet were adopted unanimously. Reference was made to the opportunity and need for greater development in the provinces. This matter will engage the attention of the new council. Various amendments of a routine character were made to the rules. Later, the tenth annual dinner was held at the Holborn Restaurant.

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS

The Council of the Incorporated Association of Architects and Surveyors has elected the following as vice-presidents: The Earl of Durham; Lord Melchett, P.C., LL.D., D.SC., F.R.S.; Lord Colwyn, P.C.; Professor Sir William Bragg, K.B.E., F.R.S.; Sir Murdoch Macdonald, K.C.M.G., C.B., M.P., M.INST. C.E.; Sir Charles A. Parsons, O.M., K.C.B., F.R.S., LL.D., D.SC.; Sir Henry Maybury, G.B.E., K.C.M.G., C.B., C.M.G., R.E.; Sir Richard Redmayne, K.C.B., M.INST.C.E.; Professor Sir Ernest Rutherford, O.M., O.B.E.; Sir Wilfrid Sugden, Mr. Frank Brangwyn, R.A.; and Mr. A. A. Hudson, K.C. The action of the Council was confirmed by an unanimous vote at a general meeting of members of the Association held in London.

MANCHESTER SOCIETY OF ARCHITECTS

At the last meeting of the Manchester Society of Architects, Mr. Francis Jones, president for 1928-9, retired, and Mr. J. T. Halliday was elected for the current year. Mr. H. S. Fairhurst is the senior vice-president, and Mr. J. G. Worthington junior vice-president; Mr. J. Swarbrick and Mr. G. Sanville remain honorary secretary and assistant honorary secretary respectively. The remaining officers in council for the current year were elected as follow: Fellows: Messrs. C. G. Agate, H. A. Dalrymple, A. C. Dickie, F. B. Dunkerley, A. W. Hennings, A. J. Hope, J. Holt, A. J. Murgatroyd, E. Prestwich, J. H. Sellers, I. Taylor, and P. S. Worthington. Associates: Messrs. E. Adams, H. W. Cruikshank, P. G. Fairhurst, J. Hembrow, G. B. Howcroft, and W. C. Young. The auditors are Messrs. H. Jones and H. H. Brown.

ARCHITECTS' BENEVOLENT SOCIETY

The seventy-ninth annual general meeting of the Architects' Benevolent Society was held at the R.I.B.A.

The Council for the year 1929-30 was elected as follows: President, the President of the R.I.B.A.; vice-presidents, Mr. Walter Tapper, A.R.A., and Mr. H. S. E. Vanderpant.

Ordinary members: Sir John Burnet, R.A.; Messrs. A. Saxon Snell, Gilbert Lovegrove, Charles Woodward, W. Henry White, C. H. Brodie, Maxwell Ayrton, H. D. Searles-Wood, Sydney D. Kitson, Percy B. Tubbs, H. Austen Hall, L. G. Pearson, R. Dircks, E. Stanley Hall (representative of the Architectural Association), Arthur Crow (representing the London Society). Hon. treasurer, Mr. Maurice E. Webb; hon. secretary, Sir Charles Nicholson; hon. auditors, Messrs. Osborn C. Hills and Mr. C. H. Brodie.

ESSEX SOCIETY OF ARCHITECTS

A special meeting of the above Society was held at the R.I.B.A. Mr. F. Wykeham Chancellor, M.A., F.R.I.B.A., president, occupied the chair. A resolution was put to the meeting and carried unanimously that the scheme of amalgamation of the County of Hertfordshire with those of Essex and Cambridge under the heading of one united society be approved and that the necessary steps be taken to effect the consolidation. Mr. Percival C. Blow, A.R.I.B.A., of St. Albans, is to act as provisional hon. secretary for the county and to undertake the preliminary work of organization in conjunction with the headquarters of the Society.

The title of the Essex Society is to be altered to that of the Essex, Cambridge and Hertfordshire Society of Architects.

THE TRADES TRAINING SCHOOLS

The judging of the work done by the students of the Trades Training Schools, 153 Great Titchfield Street, W.1, during the past session took place recently. Mr. Walter Jacob, Master of the Worshipful Company of Carpenters, presided. The work exhibited in the various classes of carpenters, joiners, handrailers, masons, glaziers, painters and decorators, plasterers, plumbers, metal-workers, stone-carvers, life modelling, tylers and bricklayers, wheelwrights, wood-carvers, and electricians provided convincing evidence of the value of the training given to actual craftsmen and apprentices at these schools. The judges commended the high standard of craftsmanship which has been attained. Prizes and medals as awarded by the judges will be distributed at Carpenters' Hall, Throgmorton Avenue, in the early part of next session, after the reopening of the schools on September 23.

COMPETITION NEWS

FREEMASONS' HOSPITAL COMPETITION

The following architects have been nominated by the President of the R.I.B.A. to take part in a limited competition for designs for the new Freemasons' Hospital for 144 beds at Ravenscourt Park, London:

Adams, Holden and Pearson.
Ashley and Newman.
Sir John Burnet and Partners.
Elcock and Sutcliffe.
J. S. Gibson and Gordon.
William A. Pite, Son and Fairweather.
Edwin T. and E. Stanley Hall.

The President, at the request of the Building Committee, nominated Sir John Simpson, K.B.E., PP.R.I.B.A., to act with Mr. A. Burnett Brown, F.R.I.B.A., as assessors. The designs have to be submitted in the autumn.

COMPETITION CALENDAR

July 15. The Travel Association of Great Britain and Ireland invite designs for an appropriate device for use on all their publicity literature. The competition is open to any British subject. Designs should be submitted both in black and white and in not more than three colours. They will be judged by a committee of three, presided over by Sir William Orpen, R.A. Premiums: £50, £20, and £15. All designs, complete with pseudonym, should be sent in to the Secretary, Travel Association of Great Britain, 35 Old Queen Street, S.W.1, by July 15.

No date. International Competition, promoted by Thonet Bros. Ltd., for the creation of new designs in furniture to be executed either wholly or partially in bentwood technique. Prizes to the total amount of 2,000 dollars will be distributed for the four competition groups as follows: For each of the four groups one first prize of $225; for each of the four groups one second prize of $125; for each of the four groups two third prizes of $75. It is reserved to the jury to allocate the total amount destined to each group in four prizes of different amounts. Furthermore, Thonet Bros. are at liberty to purchase any designs not awarded a prize for the sum of $50 each. All prize-winning or purchased designs become the property of Thonet Bros., who reserve the right to make any alterations necessitated by technical requirements during production. The jury is composed of the

following: Mr. Oliver P. Bernard, London; Architects Le Corbusier-Pierre Jeanneret, Paris; Architekt Prof. Dr. Josef Frank, Vienna; Prof. Edmund Farago, Budapest; Prof. Joseph Gocar, Rektor der Akademie der Bildenden Kuenste, Prague; Architekt Prof. Bruno Paul, Berlin; Prof. Enrico Griffini, Milan; Architekt Gerrit Rietveld, Utrecht; Architekt Gustav Siegel, Vienna; Ing. Architekt Rudolf Swierczynski, Warsaw; Architekt Prof. Adolf G. Schneck, Stuttgart; Direktor Hans Weill, Vienna; Baumeister Ernst Wiesner, Akademischer Architekt, Bruenn. The presence of at least five of the above gentlemen constitutes a quorum. Particulars from Thonet Bros. Ltd., 64 Great Eastern Street, London, E.C.2, or from any of the firm's other branches.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

The King's Arms, Kingston-on-Thames. General contractors, W. H. Gaze and Sons, Ltd. Sub-contractors: The Crittall Manufacturing Co., Ltd., metal windows; Collier's, facing brickwork; Messrs. Lawrence, rubbers; The Plasm Decoration Co., stone cills, cornice, terrazzo surrounds and entrance features; O'Brien Thomas & Co., sanitary fittings and fireplaces; London Sand Blast Company, embossed glazing; The Aston Construction Co., Ltd., steelwork.

The Old Crown, Bookham. General contractors, W. H. Brown, Ltd. Sub-contractors: Gaskell and Chambers, bar fittings; The Crittall Manufacturing Co., Ltd., metal windows; Bonesgate, facing brickwork; Lawrence, red rubbers for heads and arches, Leeds Fireclay Co., Ltd., faience work; Southwater Brick Company, brick treads and steps; Plasm Decoration Company, patent stonework; O'Brien Thomas & Co., fireplaces and sanitary fittings; Educational Supply Co., Ltd., folding doors; The Aston Construction Co., Ltd., steelwork; Buchanon and Curwen, electrical work; Leeds Fireclay Co., architectural features in Lefco terra cotta on exterior.

Westminster Bank, Watford. General contractors, Harry Neal, Ltd., who were also responsible for the demolition work. Sub-contractors: Val de Travers, damp-courses and asphalt; H. Young & Co., Ltd., structural steel; Shipwright Flooring Co., fireproof construction; Stevens and Adams, patent flooring; Beeston Boiler Co., boilers; Standard Range and Foundry Co., sanitary fittings; Diespeker & Co., Ltd., stair-treads; G. Seale and Sons, fibrous plaster; Fenning & Co., Ltd., granite and marble.

Westminster Bank, Spitalfields Market, London. General contractors, Bovis (1928), Ltd., who were also responsible for the demolition, excavation, and foundations. Sub-contractors: Ragusa Asphalt Co., damp-courses and asphalt; Damer & Co., stone; Matthew T. Shaw, structural steel; Diespeker & Co., Ltd., fireproof construction; J. F. Edner & Co., wood-block flooring; Clark, Hunt & Co., central heating; Beeston Boiler Co., boilers; Diespeker & Co., Ltd., stairtreads; Crittall's, casements; G. A. Brown & Co., Ltd., plaster; Fenning & Co., granite and marble.

Westminster Bank, Ware. General contractor, W. O. Porter. Sub-contractors: Colliers, Reading, bricks; Empire Stone, artificial stone; Diespeker, fireproof construction and patent flooring; Farmer and Brindley, decorative plaster and stone carving.

Westminster Bank, Southampton. General contractors, Rice and Son. Sub-contractors: Moreland Hayne, structural steel; Farmer and Brindley, decorative plaster; C. H. Mabey, stone carving; Benham and Son, central heating; Beeston Boiler Co., boilers; F. J. Barnes, stonework; Fenning & Co., granite; Marble Mosaic Co., marble.

TRADE NOTES

Mr. C. Elliott, B.SC., A.M.INST.C.E., A.M.I. MECH.E., who has been appointed general manager of the Birmingham section of the British Industries Fair, in succession to the late Mr. Charles Stanley, has taken a prominent part in the organization of the heavy industries display for three years. He was the honorary organizing secretary of the National Smoke Abatement Exhibition held in Birmingham in September 1926, during which an important series of conferences on every phase of the subject was conducted by the leading scientific and other authorities. Immediately afterwards he was placed in charge of the great steam power section at the 1927 British Industries Fair—the first occasion on which those participating combined in making a representative display. It was at this period that Mr. Elliott began to act as technical assistant manager to the heavy section of the Fair, under Mr. Stanley. Many of the changes and improvements which have given rise to such favourable comment on the part of exhibitors and buyers at recent Fairs were the result of practical suggestions in reports to his chief.

"Pyruma" permanence has lost an order! This—according to a pamphlet just issued by the manufacturers, Messrs. J. H. Sankey and Son, Ltd.—is how it came about. Writing for Messrs. F. Duerr and Sons, Ltd., Mr. F. Gratlidge says: "Last year we built up the bridges in our boilers with your Pyruma fire cement and this year we had great difficulty in breaking the bridges down for our annual inspection, owing to the fact that the cement had set so very hard. As we are obliged to take the bridges down each year, we see no advantage in using your cement, but will certainly use it if we have any permanent firebrick work to do, as it stands up to the job exceptionally well."

A new device, known as the Spearpoint floor clip, has been devised for securing wood joists for boarded floors over concrete. It is made of 20-gauge non-corrosive metal, and has four flanges, two of which have embossed projections and specially-designed shoulders. These are inserted into the concrete while still plastic and become immovable as the floor hardens. The two remaining flanges, punched for nailing, lie flat on the surface, leaving the newly-laid concrete clear for walking, wheeling, stacking, etc. When it is desired to fix joists, the two flat flanges are bent upwards by the claw of a hammer and nailed to the timber. Spearpoints are placed 14 in. apart along the length of the joist. They are made by the Abbey Building Supplies Co., 47 Victoria Street, London, S.W.1.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

17982. Binnie, H., and Binnie, W. Decorative building-compositions. June 12.

18302. Clay, J. H. Plaster, &c. June 14.

18060. Coanda, H. Building elements. June 12.

18467. Coles, S. O. Cowper. Building and decorative material. June 15.

18110. Heath, A. V. Slide rules, &c. June 12.

SPECIFICATIONS PUBLISHED

313018. Thomson, G. M. Process and apparatus for mixing quick-setting cementitious materials.

313278. Windover, W. L. S. Sliding windows.

313295. Abraham, R., Ltd., and Abraham, R. A. Method and process of and apparatus for manufacturing artificial stone, specially applicable to concrete tiles.

313302. Wood Bros. (Builders), Ltd., and Hunt, J. G. Sliding doors for garages, sheds, workshops, and similar structures or buildings.

313314. Hitch, W. E. Construction of bowling-greens for games.

ABSTRACT PUBLISHED

310644. Beckett, Laycock and Watkinson, Ltd., Acton Lane, and May, F. W., 106 Wrottesley Road, both in Willesden, London. Window and like frames.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICT

The Middlesex Education Committee is to erect a school for about 400 children in PINNER.

The MIDDLESEX Education Committee is to enlarge the Chiswick Polytechnic at a cost of £5,400.

The L.C.C. Education Committee has decided to reconstruct the Glangall Road school, POPLAR, and has acquired land for the extension of the site.

The MARYLEBONE Borough Council is to expend £37,000 on alterations to the baths and wash-houses.

The London Midland and Scottish Railway Co. proposes to erect one-story shops at the east of DALSTON Junction Railway Station.

The City of London Corporation has prepared a scheme for widening ST. PAUL'S CHURCHYARD and Cannon Street at a cost of £61,500.

Messrs. King and Jarrett, Ltd., printers, are to rebuild a portion of their premises at 67 Holland Street, BLACKFRIARS.

Messrs. Comben and Wakeling propose to develop their estate on the east side of the post office, having a frontage to the Harrow (main) Road, WEMBLEY.

Plans passed by the HACKNEY B.C.: Garages, rear of 199 to 217 High Street, Homerton, for Messrs. Reader Bros.; rebuilding, Messrs. Stephany's premises, Woolgar Mews, for Messrs. Makins and Badcock.

The WANDSWORTH B.C. has decided to prepare layout plans in respect of the land in Garratt Lane. The buildings to be erected will be a further instalment of the programme to erect 1,000 flats.

Plans passed at BALHAM: Additions, 223 High Road, for Messrs. Jones Bros. (Streatham), Ltd.; alterations and additions, 211 High Road, for Messrs. F. and H. F. Higgs, Ltd.; two shops, The Boulevard, High Road, for Messrs. A. C. Brown and Son, Ltd.

Plans passed by the MARYLEBONE B.C.: Building, 1 Cochrane Street, for Mr. G. C. Cooper; addition, at first-floor level, Blue Hall Cinema, Marylebone Road, for Messrs. J. Stanley Beard and Clare; building, Hall Road, Maida Vale, for Messrs. John Knox and Dyke, Ltd.

The ILFORD Corporation Electricity Committee has directed the borough electrical engineer, in collaboration with the borough engineer and surveyor, to submit sketch plans of the proposed new offices and central show and storerooms on the site at the junction of High Road and Clark's Road.

Plans passed by the POPLAR B.C.: Building additions, Islay Wharf, Hochnagar Street, for Messrs. H. C. Horswill, Ltd.; additions, "Ivy House" public-house, 23 Brunswick Street, for Mr. G. Gordon Stanham; additions, Messrs. J. Lenanton and Sons, Ltd., premises, West Ferry Road, for Messrs. Hooper, Cushen & Co.

Plans passed by the BARKING TOWN U.D.C.: Alterations, 29 Broadway, for Messrs. G. Stewart and Son; timber store, Town Quay Wharf, for Messrs. Page, Calnan & Co., Ltd.; cellulose factory, Hertford Road, for Messrs. Dryster, Ltd.; house, Park Avenue, for Mrs. J. Jones; building, King Edward's Road, for Mrs. Bone.

Plans passed by the WIMBLEDON Corporation: Two houses, Ethelbert Road, for Messrs. J. E. McDougall; two houses, Dunstall Road, for Mr. S. Derwent; extensions to factory, Riverside Road, for Messrs. Jas. Burges and Sons, Ltd.; three houses, Home Park Road, for Messrs. H. Coombs and Sons; milk distributing depot, Gap Road, for Mr. F. T. Dear.



A house at Sanderstead. By F. W. Rees and Partners. It is built in stock brickwork, with a sand-faced tile roof, the exterior above the plinth being roughcast. Throughout the interior hard wood has been used.

At a meeting of the SOUTHWARK Borough Council the Mayor said that within a reasonable period, in connection with a large housing scheme, the notorious slum area known as Zoar Street, on Bankside, would be cleared. The chairman of the Finance Committee stated that big clearance operations were about to be put into operation which would not involve the council in any expenditure.

Plans passed by the FULHAM B.C.: Building, site abutting upon Mulgrave Road and Lillie Road, for Mr. W. Doddington; garage, 2 Wandsworth Bridge Road, and New Kings Road, for Messrs. R. Dixon and Sons; building, 81 and 83 High Street, for Messrs. George Elkington and Son; building, Wandsworth Bridge Road, for Messrs. A. and A. J. Law, Ltd.; 112 flats, North End House, North End Road, for Messrs. C. and E. Joseph.

Plans passed at STREATHAM: Cinema, corner of High Road and Pendennis Road, for Mr. E. A. Stone; school hall, Valley Road, for Messrs. G. S. Daniel and Sons; two maisonnettes, Garden Lane, for Messrs. W. Hammond, Ltd.; ten houses, Belltrees Grove, for Messrs. Polden and Authers; sixteen houses, Conifers Gardens, for Mr. B. C. Utting; eighteen houses, Abbotswood Road, for Mr. A. Soden; ten houses, Kingsmead Road, for Mr. E. Wallis.

Plans passed by the WANDSWORTH B.C.: Seventy-three houses, Sheena Hill, Southfield, for Mr. H. S. Keens; new works for Aluminium Plant Vessel Co., Ltd., at Point Pleasant, for Messrs. G. Parker and Sons, Ltd.; recreation room, Convent of the Presentation, West Hill, for Mr. J. P. Conlan; three houses, Augustus Road, Southfield, for Messrs. Wm. Willett, Ltd.; two houses, Halden Road, for Messrs. Goult and Metcalfe; alterations and additions, 38 Felsham Road, Putney, for Messrs. T. H. Adamson and Son.

Plans passed by the ILFORD Corporation: Addition to printing works, Ley Street, for Messrs. Lowe, Ashton, Ltd.; six houses, Chelmsford Gardens, for Mr. A. P. Griggs; fourteen houses, Lancing Road, for Mr. E. Redbond; twelve houses, Woodford Bridge Road, for Mr. T. Anders; fifty-eight houses and shops, New North Road, for Mr. A. J. Jennings; connecting bridge between Ashmount and Hill Rise, Hamilton Avenue, for Messrs. J. and H. Smith; two houses, Felstead Gardens, Eastern Avenue, for Suburban Developments (London), Ltd.; three houses, Uphall Road, for Mr. C. Holden; ten houses, Highcliffe Gardens and Redbridge Lane, for Mr. T. Anders; six shops and houses, Ley Street, and shop, Vicarage Lane, for Messrs. Haines and Warwick, Ltd.

EASTERN COUNTIES

The COLCHESTER Corporation is to erect 130 houses on a site on the Ipswich–Harwich Road.

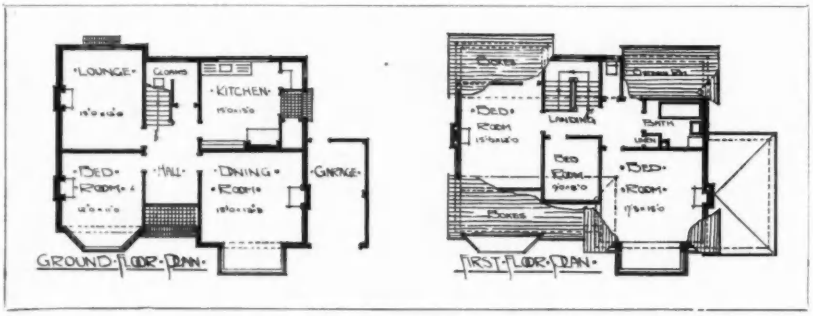
Plans passed by the CHELMSFORD Corporation: Two houses, Lynmouth Avenue, for Mr. W. J. Wade; house, Springfield Road, for Mr. H. Misseuroy; alterations to shop, 54a High Street, for Messrs. H. A. Leon & Co.; two houses, Goldlay Avenue, for Mr. W. Campden.

The Hospitals Committee of the ESSEX County Council and COLCHESTER Corporation has prepared plans for additions to the children's villa at Severalls Mental Hospital at an estimated cost of £2,980; additional accommodation for nurses at an estimated cost of £9,842; and for a pathological laboratory at an estimated cost of £300.

Plans passed by the COLCHESTER Corporation: Engine-house, Greenstead Road, for Shell-Mex, Ltd.; house, Cambridge Road, for Mr. O. S. Locke; additions, 124 Butt Road, for Messrs. Appleton and Sons; bungalow, Berechurch Poultry Farm, Kingsford Hill, for Papworth Industries, Ltd.; house, Heath Road, Lexden, for Mr. S. Willis; billiard-room, "The Grapes" public-house, Mersea Road, for Mr. S. M. Osborne; four houses, Turner Road, for Mr. E. Mower; house, Balkerne Hill, for Mr. W. A. Jeffery; five houses, Brook Street, for Mr. E. Mower; house, Ipswich Road, for Mr. C. P. Smith; two houses, Drury Road, for Messrs. Appleton and Sons; alterations and additions to two cottages, Clay Lane, Parson's Heath, for Mr. J. W. Trudgett; bungalow, Mersea Road, for Mr. H. J. Wright.

SOUTHERN COUNTIES

The GUILDFORD Watch Committee suggests a site in Stoke Park at the junction of Nightingale Road for the erection of a new fire station.



Ground- and upper-floor plans of the house at Sanderstead. Built on a very steep site, it is designed so as to give the maximum amount of sunlight and a view from all angles.

The BRIGHTON Corporation Pavilion Committee has decided to improve the heating arrangements of the buildings on the Pavilion estate at a cost of £3,750.

Plans passed by the DOVER Corporation: Addition to workshop, factory, Beaconsfield Road, for Messrs. Worsfold and Hayward; addition to store, Peter Street, for Mr. S. E. Castle.

The HERNE BAY U.D.C. is in further communication with the Ministry of Health on the question of a scheme for a joint isolation hospital to serve the Herne Bay and Whitstable urban and Blean rural districts.

The EASTBOURNE Corporation Finance Committee recommends plans for extensions at the Town Hall; a suggestion to meet the South-Eastern Society of Architects and obtain their advice on the proposed extensions having been rejected.

Plans are to be prepared for a new hotel at WORTHING. The new building is to be erected on a site at the corner of Marine Parade and Grand Avenue. The scheme includes the erection of a garage to accommodate 150 cars. The estimated cost is over £200,000. Messrs. Yates, Cook, and Darbyshire are the architects.

Plans passed by the HERNE BAY U.D.C.: House Queensbridge Drive, for Mr. H. C. Box; house, Sandown Drive, for Mr. W. G. Atkins; bungalow, Carlton Hill, for Messrs. Goodwin and Russell; house, Station Road, for Mr. W. Hancock; bungalow, Albany Drive, for Messrs. G. R. Browne and Son; two bungalows, Minster Drive, for Mr. W. Hancock; bungalow, Albany Drive, for Messrs. Markwells.

Plans passed by the GUILDFORD Corporation: Five houses, Joseph's Road, for Messrs. G. Hart & Co.; enlargement of branch store, Woodbridge Hill, for the Guildford and District Industrial Co-operative Society, Ltd.; store, Friary Street, for Messrs. Fogwills, Ltd.; house, Mountside, for Mr. E. Pascall; house, Poltimore Road, for Mr. H. Ashenden; six cottages, Woodlands Road, for Mr. H. Ashenden; three houses, Woking Road, for Mr. H. Ashenden; warehouse and covered yard, North Place, for the Guildford and District Industrial Co-operative Society, Ltd.; house, Ridgemount, for Mr. H. C. Watts; layout of new road, south side of London Road, for Mr. A. C. Burlingham.

Plans passed by the EASTBOURNE Corporation: Additions, Star Brewery, Star Road, for Mr. A. Ford (architect); house, Baldwin Avenue, for Mr. C. H. Mayo; house, Upperton Road, for Messrs. W. Lewellyn and Sons, Ltd.; alterations, "London House," South Street, for Messrs. Bentley's, Ltd.; conversion of All Saints' Vicarage, Grange Road, into two houses, for Messrs. P. D. Stonham and Sons (architects); bungalow, Park Avenue, for Mr. F. C. Benz (architect); houses, Park Close estate, for Mr. F. G. Lovell (architect) on behalf of Park Close, Ltd.; three blocks of flats, Dacre Street for Messrs. Rowsell and Ticehurst; house, Northiam Road, for Mr. F. C. Benz (architect); shop, Lottbridge Road, for Mr. A. E. Bailey (architect); two houses, Dillingburgh Road, for Mr. A. Ford (architect); alterations and additions, 140-144 Terminus Road, for Messrs. J. Lyons, Ltd.; alterations and additions, Bobby's premises, Lismore Road, for Messrs. Debenhams, Ltd.

SOUTH-WESTERN COUNTIES

The CHELTENHAM Corporation has asked the borough architect to prepare plans for a rehousing scheme on the St. Paul's improvement area.

The CHELTENHAM Corporation Housing Committee has obtained a site of 4 acres of land in Whaddon Road, and tenders are to be invited for the erection of houses thereon.

Plans passed by the CHELTENHAM Corporation: Additions, Corner House Café, Promenade, for Cadena Café Co.; two houses, Pilford Avenue, for Messrs. Bendall and Sons; house, Brooklyn Road, for Mr. H. C. Waghorne; cinematograph chamber, Cheltenham Theatre, Regent Street, for the Cheltenham Playhouse Co., Ltd.; alterations and additions, 5 Promenade, for Messrs. C. and P. James; extension of printing works, Swindon Road, for Cheltenham Press Co.; re-erection of Tudor Cottage, Dowdeswell, for Mr. C. Rogers-Coxwell; two houses, Beards' Ash, Woodmancote, for Mr. W. H. Bowd; alterations, The Doone, East End Road, Charlton Kings, for Messrs. Healing and Overbury; house, Hewlett Road, for Mr. F. Keene; ninety-two houses, between Hewlett Road and Whaddon Road, for the Corporation; two houses, Blackedge Farm, Leckampton Hill, for the Misses Hull and Lacy.

MIDLAND COUNTIES

The COVENTRY Corporation has decided to erect a gasmeter testing station at Foleshill at a cost of £3,150.

The managers of the Church Schools, Keelings Road, NORTHWOOD, Hanley, are to rebuild the Northwood Schools.

The County Education Committee is to erect an elementary school on the Headlands estate, NORTHAMPTON.

The Board of Education has approved the plans of the proposed new school to be erected by SMETHWICK Education Committee at Uplands.

The Board of Education has approved plans of the SMETHWICK Education Committee for the erection of a central clinic at a cost of £6,617.

Plans passed by the GLOSSOP Corporation: Shop, junction of James Street and Victoria Street, for Mr. H. Oldfield; storeroom, Primrose Lane, for Mr. O. Cranshaw.

The BIRMINGHAM Corporation is seeking sanction to borrow £325,000 to enable the Gas Committee to carry out the reconstruction and extension works at Adderley Street, Windsor Street, Nechells, and Swan Village gas works.

The SMETHWICK Corporation has appointed Mr Crosbie and Mr. R. Holbrow as architect and quantity surveyor respectively in connection with the erection of new premises for the gas department in Crocketts Lane at a cost of £17,344.

Plans passed by the SMETHWICK Corporation: House, Devonshire Road, for Mr. W. H. Bomber; house and three shops, Brasshouse Lane, for Messrs. W. Hankins, Ltd.; alterations, 512 Bearwood Road, for the Maypole Dairy Co., Ltd.

The Ministry of Health has sanctioned the erection, by the SMETHWICK Corporation, of 112 houses on the Old Chapel estate, comprising ninety non-parlour and twenty-two parlour type, at the estimated cost of £350 per house for the non-parlour type and £425 for parlour type.

The STOKE-ON-TRENT Corporation Gas Committee has considered the question of arrangements with the Housing Committee for the erection of a number of all-gas houses and has asked the engineer to submit quotations to the Housing Committee.

At a meeting of the STOKE-ON-TRENT Corporation the city surveyor reported that draft plans and estimates for sewers and street works in respect of the layout of the Carmountside estate, proposed to be utilized for housing purposes, had been prepared in readiness for submission to the Ministry of Health.

Plans passed by the NORTHAMPTON Corporation: Eleven houses, Wycliffe Road, for Messrs. W. and A. Throssell; private school, Park Avenue, for Miss K. S. Carter; two houses, Forfar Street, for Messrs. W. S. Brown and Son; parish hall, Wellingborough Road, Weston Favell, for Weston Favell Parish Council, per Northampton R.D.C.; two houses, Weston Way, for Mr. H. P. Cross; house, off Highfield Road, Duston, for Mr. P. C. Major; conveniences and cloakroom, Wesleyan School, Queens Road, for the trustees of Queens Road Wesleyan Church; reconstruction of warehouse and alterations to offices, La Wood Street, for Mr. J. Jelley; roads, between Sandringham Road and Albany Road, for the Northampton Co-operative Society, Ltd.; four houses, Sandringham Road, for the Northampton Co-operative Society, Ltd.; two houses, Forfar Street, for Messrs. W. S. Brown and Son.

NORTHERN COUNTIES

The BARNSLEY Corporation is to select a site in New Street for a covered market.

The MANCHESTER Education Committee is seeking sanction to borrow £75,936 for the erection of new schools.

The MANCHESTER Corporation has voted £415,927 for the acquisition of land and the erection of houses on the Chorlton estate extension.

The RIPON Corporation has obtained sanction to borrow £16,000 for the erection of houses on the Aismunderby Housing site.

The RIPON Corporation Gas and Electricity Committee has passed plans of the proposed showrooms and decided to obtain tenders.

The MANCHESTER Corporation recommends the purchase of land at Alexandra Park for the purposes of a show-ground and open space at a cost of £69,985.

The MANCHESTER Corporation is seeking sanction to borrow the following sums for the waterworks department: Roads, £71,400; dam and tunnel, £92,750.

Plans passed by the OTLEY U.D.C.: Alterations, Bridge Street, for Mr. G. Winsburg; two houses, Harecroft Road, for Mr. G. King; bungalow, Harecroft Road, for Mrs. Fieldhouse.

The Tramways Committee of the LEEDS Corporation has approved plans for the extension of the motor omnibus garage and tenders are to be invited for carrying out the work.

At a meeting of the LEEDS Watch Committee, consideration was adjourned of the plan of West Leeds Amusements, Ltd., for a picture-house, six lock-up shops, thirteen lock-up garages, etc., at Wellington Road, New Wortley.

The MANCHESTER Education Committee has approved plans for a Roman Catholic junior school (St. Catherine's, Didsbury) for 100 to 120 children in temporary premises formerly occupied by the Country Club, Parrs Wood Road, Didsbury.

The MORECAMBE Education Committee has passed plans prepared by the borough surveyor for alterations, etc., to the West End school in connection with the reorganization of elementary schools within the borough at a cost of £5,315.

Plans passed by the SHIPLEY U.D.C.: House and shop, Bingley Road, for Mr. A. Dimmock; four houses Aireville Close, and four houses Aireville Drive, for Mr. J. Chippindale; house Aireville Drive, for Mr. Walton; house, Moorhead Lane, for Mr. E. Parkinson; two houses, Thackley Old Road, for Mr. A. P. Obank; four houses, Thackley Old Road, for Messrs. Mellor and Booth.

Plans passed by the YORK Corporation: Additions, Talbot House, Hull Road, for Tang Hall W.M. Club and Institute; alterations, Clarence Street, for the North Riding Haulage Co., Ltd.; additions, Museum Street, for Mr. J. Hetherton; additions, Goodramgate, for Messrs. Hunter and Smallpage, Ltd.; house, Grange Croft, for Mr. J. E. Trendall; two houses, Malton Road, for Mr. Denby Collins; house and shop, Dringhouses, for Mrs. Siddall; two houses, Ainsty Avenue, for Ainsty Building Estates; two houses, Poppleton Road, for Mr. J. Sawdon; house, Malton Road, for Mr. W. H. Maw.

Plans passed by the MORECAMBE Corporation: Balcony, Alhambra, for Alhambra (Morecambe), Ltd.; house, Longlands Crescent, Heysham, for Mr. M. Wood; four houses, Devonshire Grove, for Messrs. Naylor and Robinson; house, Heysham Road, for Mr. J. Woolfendon; two houses, Balmoral Drive, for Messrs. F. Moore & Co.; house, Bailey Lane, Heysham, for Mr. W. Woodman; alterations, 24 Euston Road, for Messrs. Johnson Bros.; amended layout, Regent Park estate, for Messrs. Wm. Gardner & Co.; two houses, Walker Grove, for Messrs. Naylor and Robinson; two houses, Margaret Street, for Mr. A. Hargreaves.

Plans passed by the TYNEMOUTH Corporation: Eight houses, Boundary Road, St. George's estate, Cullercoats, for Messrs. H. D. Burton, Ltd.; four houses, Mast Lane, St. George's estate, Cullercoats, for Mr. J. R. Wallace; house, St. George's Road, Cullercoats, for Messrs. Beatyman and Gray; two houses, Ashleigh Grove, for Mr. A. K. Tasker; twenty houses, Wansbeck Avenue, Cullercoats, for Mr. W. Stockdale; twenty-four houses, Wansbeck Avenue, for Mr. H. Jewels; six houses, Mast Lane, Cullercoats, for Mr. W. Stockdale; amended plan of proposed theatre, Russell Street, North Shields, for Messrs. Dixon and Bell; eight houses, Hawkey's Lane estate, North Shields, for Messrs. F. R. N. Haswell and Son.

Plans passed by the BOLTON Corporation: Extensions, Alma Mill, Prescot Street, for the Bolton Manufacturing Co., Ltd.; addition, White Croft, Chorley Street, for Messrs. T. R. Bridson and Sons, Ltd.; fourteen houses, St. Mary's Avenue, for Mr. Aaron Greenhalgh; layout plan, Lydgate Lane, for the executors of Henrietta Bailey; two houses, Danesbury Road, for Mr. Albert Coward; two houses, Junction Road, for Mr. R. G. Hirst; three houses, Mellor Grove, for Messrs. Wm. Kay (Bolton), Ltd.; extension to bakehouse, 312 Halliwell Road, for Messrs. O'Nickson and Brother; shop, Newport Street, for Messrs. Wm. Timpson, Ltd.; amended plan of twenty houses, Beechfield Road, Barcroft Road, and Knowsley Road, for Messrs. T. P. Smith, Ltd.; fourteen houses, Paris Street, for Mr. F. H. Cartwright; three houses, Mellor Grove, for Messrs. Wm. Kay (Bolton), Ltd.

SCOTLAND

The GLASGOW Corporation is to acquire 40 acres of land at Carntyne for a housing scheme.

The Office of Works is to erect an employment exchange at Macduff Street, GLASGOW.

Messrs. Miller and Black are the architects for a workshop to be erected in Great Western Road, GLASGOW.

The GLASGOW Education Committee is obtainign a site in Elmvale Street for the erection of an elementary school.

Messrs. Walter Hubbard, Ltd., 15 Smith Street, Hillhead, are to extend their premises at Belmont Lane, GLASGOW.

WALES

At a meeting of the SWANSEA Corporation the borough estate agent reported in regard to an application received from a local firm of architects for a lease of a site at Townhill for the erection of a cinema. The borough architect reported as to sites at Townhill which had been reserved for the erection of buildings other than houses, and it was decided that a site now indicated be let for the erection of a cinema, and that the Estates Committee be requested to take the necessary steps to negotiate such letting.

MISCELLANEOUS

Plans passed by the NEWPORT (Isle of Wight) Corporation: Sub-station, Drake Road, for Mr. V. Aldridge, architect, on behalf of Edmundsons' Electricity Co.; workshop and stores, Trafalgar Road, for Messrs. Stratton and Millgate, architects, on behalf of Messrs. W. Matthews and Son.

Plans passed by the DOUGLAS (Isle of Man) Corporation: Parish hall, Alexander Drive, for the trustees of All Saints' Church; alterations to premises, West View Lane, for the Manx Co-operative Society; alterations, South Quay, for Messrs. Corlett, Sons and Cowley, Ltd.; additions, 10 Melbourne Street, for Mr. R. Quayle; alterations to High School, Park Road, for the Isle of Man Education Authority.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	•1 7½	1 2½
C	Aldeburgh ..	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A	Barnard Castle	N.E. Coast	1 7½	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	•1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_1	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A	Consett ..	N.E. Coast	1 7½	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	.....	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EAST-BOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	•1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	•1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	•1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth	S. Wales & M.	1 7½	1 2½
	S. and E. Glamorganshire			
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	•1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	•1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	•1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

• In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.

Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete 4-2-1 in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	0
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¾ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	0	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0

Usual trade extras for large blocks.

York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6

Cement and sand, see "Excavator," etc., above.

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	6
DO. 2½ in. thick, per ft. sup.	0	1	3

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies	£13	0	0
Countess	25	0	0
Duchess	32	0	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2

Cement and sand, see "Excavator," etc., above.

Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6	7 0
Grey-green do.	5	9 0
Green peggies, 12 in. to 8 in. long	4	13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	4	0	0
DO., machine-made do., per square	3	10	0

Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0

Memel or Equal. Slightly less than foregoing.

Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	4
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	3
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	5	0
DO. framed in floors, roofs, etc., per ft. cube	0	6	0
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO. 3-ply per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	10	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	6
If ramped, per ft. run	0	5	0
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 9½d. *per hour;* MATE, *do.* 1s. 4d. *per hour;* ERECTOR, 1s. 9½d. *per hour;* FITTER, 1s. 9½d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1s. 9½d. *per hour;* MATE OR LABOURER, 1s. 4½d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc. per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 9½d. *per hour (plus allowances in London only);* LABOURER, 1s. 4d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 8d. *per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1s. 6d. to 2s. per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1s. 8d. *per hour;* LABOURER, 1s. 4d. *per hour;* FRENCH POLISHER, 1s. 9d. *per hour;* PAPERHANGER, 1s. 8d. *per hour.*

Genuine white lead, per cwt.	£3	1	6
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak												
1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak												
1 side	6½	5	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, JULY 10

R.I.B.A., 9 Conduit Street, W.1. Final and Special Examinations until Thursday, July 11. Tour to United States and Canada by Cunard liner "Laconia"; date of departure July 13. Members wishing to take part in this trip should apply for further particulars to the Secretary.

UNIVERSITY OF LONDON, University College, Gower Street, W.C. Exhibition of Egyptian Antiquities. Open daily till July 27, from 10 a.m. to 5 p.m. July 10 and 19 from 6.30 to 8.30 p.m. **10 a.m.**

THURSDAY, JULY 11

R.I.B.A., 9 Conduit Street, W.1. Closing date of Final and Special Examinations.

FRIDAY, JULY 12

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Annual Exhibition of Students' Work. Open until July 27.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Tudor and Jacobean Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Mural Decoration." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

SOUTH-EASTERN SOCIETY OF ARCHITECTS. Eastbourne conference on "Beautifying our Surroundings." First day. Visits by motor-cars: To Pevensey Castle for inspecting the proposed sites for slaughter-houses. To Polegate, for viewing the proposed approach roads, which would avoid or pass through Willingdon Village. To Holywell Retreat through the Victoria Drive and Paradise. Along the sea front, through Terminus Road to the Old Town, where alternative schemes for the projected widening of High Street will be explained, and thence to the Towner Art Gallery and The Park Close in Compton Place Road. At 7.30 the members of the conference (morning or evening dress) will be received by Alderman Gilbert Soddy, J.P., who will extend the Municipal Welcome at 8 p.m. The chair will be taken at 8 o'clock by the President of the Society, Mr. H. V. Lanchester, F.R.I.B.A. Introductory lantern lecture by the Hon. General Secretary, Mr. R. Goulburn Lovell, A.R.I.B.A., after which the meeting will consider in general terms the subjects to be discussed in detail on the day following.

SATURDAY, JULY 13

Sunrise, 4.47. Sunset, 9.13.

R.I.B.A. Departure from Liverpool on s.s. "Laconia" for trip to U.S.A.

LONDON COUNTY HALL, Westminster Bridge Road, S.E.1. Exhibition of Prints and Watercolours: "Views of Old London." Open to the public every Saturday from 10.30 a.m. to 12 noon, and 1.30 p.m. to 3.30 p.m. Bank Holidays from 10.30 a.m. to 12 noon, and 1.30 p.m. to 4.30 p.m. **10.30 a.m.**

ROYAL SANITARY INSTITUTE. Congress and Health Exhibition at Cutlers' Hall, Sheffield. President of the Architecture and Engineering section, Sir Banister Fletcher, F.R.I.B.A., F.S.I. Open daily until July 20. **12 noon.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "The Ionides Collection." By Miss M. Chamot. 12 noon. Indian Section: "Pottery." By T. F. Wilson, F.R.S.A.I. "Museum Masterpieces." By Miss M. Chamot. 3 p.m. "Chippendale." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SOUTH-EASTERN SOCIETY OF ARCHITECTS. Eastbourne conference on "Beautifying our Surroundings." Second day. In the morning similar visits will be made by motor-cars to those on July 12. Luncheon at 1 o'clock in The Park Close. The conference will be continued there at 3 o'clock, where the sessions will be held either in the open or under cover. On the kind invitation of the Mayor and Corporation, tea will be served during the afternoon, after which the conference will be resumed and resolutions passed or confirmed at a plenary session in the evening.

MONDAY, JULY 15

R.I.B.A., 9 Conduit Street, W.1. Special General Meeting to resume consideration of the Council's proposals for the revision of the R.I.B.A. Scale of Professional Charges. **6 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By Miss M. Chamot. 12 noon. "English Porcelain." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

TUESDAY, JULY 16

ROYAL SANITARY INSTITUTE CONGRESS AT SHEFFIELD. Meetings of Engineers' and Surveyors' section in the University, and Sanitary Inspectors in the Mappin Hall. **10 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Stained Glass." By Miss M. Chamot. 12 noon. "Gothic Art." By Miss M. Chamot. 3 p.m. **12 noon.**

WEDNESDAY, JULY 17

R.I.B.A., 9 Conduit Street, W.1. Tite Final "en loge" Competition.

ROYAL SANITARY INSTITUTE CONGRESS AT SHEFFIELD. Meetings of Architecture and Engineering section in the Firth College, and Representatives of Sanitary Authorities in the Town Hall. 10 a.m. Visit to Waterworks, Sewage Disposal Works, Iron, Steel, Silver-plate, and Cutlery Works. 2 p.m. **10 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Woodwork." By T. F. Wilson, F.R.S.A.I. "Ironwork." By Miss M. Chamot. **3 p.m.**

THURSDAY, JULY 18

R.I.B.A., 9 Conduit Street, W.1. Soane Final "en loge" Competition.

ROYAL SANITARY INSTITUTE CONGRESS AT SHEFFIELD. Meetings of Architecture and Health section in the Firth College, 10 a.m. Congress Dinner, Grand Hotel, 7.30 p.m. **10 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Medieval Sculpture." By Miss M. Chamot. **12 noon.**

FRIDAY, JULY 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Woodwork." By T. F. Wilson, F.R.S.A.I. 12 noon. "Seventeenth-century Wall Decoration." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

LONDON SOCIETY. Visit to Hampton Court and William IV's Banqueting Hall. Exhibition of Tennis in the Old Court. Train from Waterloo at 1.55 p.m.; meet at the bridge, over the old moat at 2.45 p.m. **1.55 p.m**

SATURDAY, JULY 20

Sunrise, 5.5. Sunset, 9.6.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Furniture." By Miss M. Chamot. **12 noon.**

SOUTH-EASTERN SOCIETY OF ARCHITECTS. Visit to Reigate of the Guildford and Croydon Chapters.

MONDAY, JULY 22

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Persian Metalwork." By T. F. Wilson, F.R.S.A.I. "Gothic Woodwork." By Miss M. Chamot. 12 noon. "Far Eastern Pottery." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

R.I.B.A., 9 Conduit Street, W.1. Exhibition of Photographs of Modern American Skyscrapers. Open daily between 10 a.m. and 7 p.m. to Friday, August 2. (Saturday 2 p.m.). **10 a.m.**

Visit to U.S.A. Arrival of s.s. "Laconia" at New York. Accommodation at Pennsylvania Hotel.

MONDAY, JULY 22—*continued.*

IMPERIAL GALLERY OF ART, Imperial Institute, South Kensington, S.W. Rome Scholarship in Architecture. Exhibition of drawings submitted in 1929 final competition. Open until July 20.

NORTHAMPTONSHIRE, BEDFORDSHIRE AND HUNTINGDONSHIRE ASSOCIATION OF ARCHITECTS. Summer Meeting at Kettering and district. Assemble at the George Hotel at 10.45 a.m. **10.45 a.m.**

TUESDAY, JULY 23

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Stained Glass." By Miss M. Chamot. **12 noon.**

WEDNESDAY, JULY 24

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Architecture." By T. F. Wilson, F.R.S.A.I. "Persian Pottery." By Miss M. Chamot. **3 p.m.**

LONDON SOCIETY. Motor Coach Excursion to typical London open spaces, concluding with tea at Avery Hill, Eltham. Tickets: Price 5s. each, including tea and gratuities. Return to town about 6.30 p.m. Applications to the Secretary Lancaster House, St. James's, S.W.1. **2.15 p.m.**

THURSDAY, JULY 25

R.I.B.A. Visit to U.S.A. Day at New York. Departure at 4.08 p.m., via Baltimore and Ohio Railroad for Washington. Arrival at 9.50 p.m. Accommodation at Washington Hotel.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By Miss M. Chamot. 12 noon. "Italian Decoration." By Miss M. Chamot. 3 p.m. **12 noon.**

FRIDAY, JULY 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Georgian Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Eighteenth-century Wall Decoration." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

SATURDAY, JULY 27

Sunrise, 5.15. Sunset, 8.57.

R.I.B.A. Visit to U.S.A. Arrival at Detroit, 8.30 a.m. Accommodation at Statler Hotel. Sightseeing by motor.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "General Tour." By T. F. Wilson, F.R.S.A.I.; "French Renaissance Art." By Miss M. Chamot. 3 p.m. "Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. 7 p.m. **3 p.m.**

SUNDAY, JULY 28

R.I.B.A. Visit to U.S.A. Arrival at Niagara Falls, 1.35 p.m. Accommodation at Clifton Hotel.

MONDAY, JULY 29

R.I.B.A. Visit to U.S.A. Departure from Niagara Falls at 11.25 a.m. via electric car, connecting at Lewiston with steamer across Lake Ontario. Arrive at Toronto at 2.45 p.m. Accommodation at King Edward Hotel.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Seventeenth-century Furniture." By Miss M. Chamot. **3 p.m.**

TUESDAY, JULY 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Later English Furniture." By Miss M. Chamot. **3 p.m.**

WEDNESDAY, JULY 31

R.I.B.A. Visit to U.S.A. En Route Montreal, passing Thousand Islands. Arrival at Montreal 5.45 p.m. Accommodation at Windsor Hotel.

THURSDAY, AUGUST 1

R.I.B.A. Visit to U.S.A. Motor sightseeing in the city of Montreal. Departure for Quebec via Canadian National Railways at 5.10 p.m. Arrival at Quebec 9.55 p.m. Accommodation at Chateau Frontenac Hotel.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Pottery." By L. O. Faraker. "Tudor and Jacobean Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Stained Glass." By T. F. Wilson, F.R.S.A.I. 3 p.m. "Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon.**

FRIDAY, AUGUST 2

R.I.B.A. Visit to U.S.A. Motor tour to the famous shrine of Ste. Anne de Beaupre, returning by way of Montmorency Falls.

SATURDAY, AUGUST 3

Sunrise, 5.26. Sunset, 8.46.

R.I.B.A. Visit to U.S.A. Quebec. Embark in evening on s.s. "Ascania."

SUNDAY, AUGUST 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Gifts through the National Art Collections Fund. By Miss E. M. Spiller, O.B.E. 2.45 p.m. "Beauty of Colour." By Miss E. M. Spiller, O.B.E. **4 p.m.**

MONDAY, AUGUST 5

Bank Holiday.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. 12 noon. General Tour. By L. O. Faraker. "English Furniture." By T. F. Wilson, F.R.S.A.I. 3 p.m. General Tour. By L. O. Faraker. **12 noon.**

WEDNESDAY, AUGUST 7

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.1. Indian Section: "Architecture." By Miss M. Chamot. **3 p.m.**

THURSDAY, AUGUST 8

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. 3 p.m. "Recent Acquisitions." By Miss M. Chamot. **7 p.m.**

SATURDAY, AUGUST 10

Sunrise, 5.37. Sunset, 8.33.

R.I.B.A. Visit to U.S.A. s.s. "Ascania" due to arrive at Plymouth.

SUNDAY, AUGUST 11

R.I.B.A. Visit to U.S.A. Arrival of s.s. "Ascania" at London.

SATURDAY, AUGUST 31

Sunrise, 6.10. Sunset, 7.50.

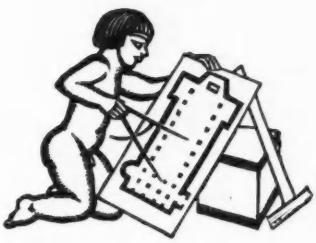
A.A.S.T.A. Summer Tour to the Rhineland via the Ardennes and the Moselle. From the evening of August 31 to September 8 or 12.



WILLIAM BOOTH MEMORIAL BUILDINGS, DENMARK HILL, S.E.
ONE OF THE QUADRANGLES SHOWING THE HOSTELS.

These new buildings, opened on Monday last by Prince George, have been erected from the designs of Gordon and Viner and Sir Giles Gilbert Scott, associated architects, as a memorial to the founder of the Salvation Army, General William Booth, and as a training college for male and female cadets. Illustrations of the administration buildings, hospitals, assembly hall, etc., appear on pages 46 to 54.

THE ARCHITECTS' JOURNAL



· WEDNESDAY, JULY 10, 1929

PROVIDE AND FIX: ONE HOLIDAY

"*Come away with me, Tom.*"
C. KINGSLEY: *The Invitation.*

THERE are only two kinds of holidays for an architect—the "Busman's" and The Complete Change.

In the former case he takes his architectural symbols, packed in his mind, for comparison with those of his place of holiday; for even if he speaks no word of any foreign tongue, he will understand everything that the buildings say. He is like a sage of Lagado, of whom Gulliver tells us that their ideal was, first, to prevent the corrosion of their lungs by the speaking of words; and, secondly, to invent a universal language of symbols. Our architect, however, must not overburden himself with too weighty a knowledge, too accurate a memory, or he will carry the resemblance to the Lagadans too far. "I have often beheld two of those sages almost sinking under the weight of their packs, like pedlars among us, who, when they met in the streets, would lay down their loads, open their sacks, and hold conversation for an hour together."

Have we not ourselves gone a-holidaying with a gentleman, so wise that, if his eye met a great work by Bramante or Palladio, he would straightway open his sack of professional learning and weigh up its rustications, compare its voids and solids, and draw conclusions from its cornices and strings, all the while wrapt in gloomy silence?

Albeit, it is not necessary to enjoyment of the universal language of architecture to become a pedant or a pillar of salt. Even a sage of Lagado, for shorter conversations, carried merely "implements in his pockets, and under his arms, enough to supply him." And our architect must not fret himself over the *minutiæ* of mouldings, or mentally hand out the correct proportion to every doric order. On holiday let him be of jocund mood, and apply to every building the test of whether it is a "jolly thing"—the "grand thing," and even the "decent thing" let him bow or nod to, and pass on. Only the "jolly thing" (and perhaps the "shocking thing") are of his mood, and merit an understanding of their symbols and a sympathy with their joy; they smile or grin at him and he at them; they tell him there is happiness in the buildings of men wherever they be.

So much we can say for the universal language of symbols; or as the holidaying busman remarked: "'osses is 'osses anywheres."

The Complete Change becomes more desirable to the architect as he gets well into middle age, and the fatigue of planning overtakes him, and the pencil is as a nausea to the eye, and the thousand odds and ends of other people's business make the mind into a pawnshop. Really tired, he no longer dreams of cities clamourous in France, or towns troubled with tongues in the West of England. Rather is it his puzzle to find a manner of living without a house for three or four restful weeks. He elopes from art by stealth, and perhaps in a hired caravan is wheeled to the lonelier parts of Somerset or Devonshire, Wales, or the Moors. There he travels incognito, and secreted from postmen, telegraph boys, and special messengers. Having chosen a very old horse, he moves slowly a short distance every day.

His occupations are grooming, cooking, washing up, driving, and fetching the milk; with family bathing and cricket morning and evening. None of these is connected with his professional existence. For art there is the fiddle he can practise in some lonely dell, or the voice he can produce in a family catch. On a rainy day how snug is that one small space for beds, meals, cooking, and converse; how comic the mixture of its uses.

Second to a caravan, and for a robust stomach, let him choose a ship. There is no healthier change, especially if he be an arty fellow, than to be out of sight of land and houses, for he will not imagine grave palaces on the dancing foam, or be bewitched by a mirage of tall towers bobbing above the waves. Rather the fresh air, and consequent appetite for salt beef, biscuit, and rum will put his æsthetic nerves to sleep, to the smell of tar and the sea.

Wherever his holidays take him may they bring him refreshment.

NEWS & TOPICS

THE BRIDGE-BUILDERS

ONE of the first acts of the Labour Government has been to adopt many of the schemes, left in the various departments by their predecessors, for the relief of unemployment. The most important of these deal with road construction and widening, and included in them is the Charing Cross scheme, with which is linked up the reconstruction of Waterloo Bridge. It is evident that Mr. Herbert Morrison, the new Minister of Transport, has lost no time in "getting busy," for Mr. J. H. Thomas, the Lord Privy Seal, in outlining the Government plans in the House of Commons last week, paid a tribute to the representatives of the London County Council and the Southern Railway, who, he said, had "responded magnificently" when meeting Mr. Morrison. Apparently, a beginning is to be made with the reconstruction of Waterloo Bridge; and the building of Charing Cross Bridge, on the lines of the £11,000,000 scheme, will follow in due course. Thus, after a protracted and entirely unnecessary delay, there is a real hope of getting something done. Mr. MacDonald has also decided to waste no time. On Saturday he made a definite promise to introduce a short Bill within the next three weeks to restore the housing subsidy of 1924.

*

TO SCOTCH "RIBBON DEVELOPMENT"

"Ribbon development" is one of the ugliest signs of the time. It is derided by all who seek to preserve the beauty of the countryside, and the phrase has rightly become a term of reproach. The blame does not rest so much upon the parasites that batten upon the arterial road, as upon those who went to the trouble of laying out expensive roads without attempting to see that they performed their functions properly.



Mr. J. L. Gleave, the only Englishman among ten selected finalists in the Columbus memorial airport competition.

R.I.B.A. REFERENDUM

The results of the referendum on the resolution of the R.I.B.A. to open its doors to a wider class of Licentiates shows that 1,930 voted for it and 693 against. Of Associates only 600 voted for, and 429 against, so that unanimity was not quite so complete as the total majority of 1,237 suggests. Votes were recorded by over three-quarters of the poll, which shows that the measure was given every consideration by members, and is no imposition from headquarters rushed through between apathy and indifference.

*

COLUMBUS MEMORIAL AIRPORT COMPETITION

Salute to Mr. J. L. Gleave, aged twenty-one, who passed out of Manchester University School of Architecture a year ago, and entered the office of Mr. T. C. Howitt, architect of the Nottingham Exchange buildings recently illustrated in THE ARCHITECTS' JOURNAL. For he is the sole Englishman out of ten interim winners selected in the first round of the international Christopher Columbus memorial airport competition. This grandiose scheme proposes to mingle sentiment with big business in a manner typically transatlantic. Sponsored by the Pan-American Union of Republics, it contemplates the erection on the island of San Domingo, in whose cathedral Columbus was laid to rest, of vast buildings on a site of some 2,500 acres. They are to include a house for the President of the Republic of San Domingo, administrative offices, an aircraft museum, and the tomb of Columbus, and to culminate in an air lighthouse 600 ft. high. Thus is to be expressed "the wonder, glory, and romance of the Spanish Main." To have represented his country with success among 451 competitors, representing forty different nations, may well bring Mr. Gleave more satisfaction than the preliminary monetary award of £400. Salute to him—and success in the final competition!

*

A "SOCIETY OF ENGLAND"?

It has been suggested that the common purpose for which the C.P.R.E., the Society for the Protection of Ancient Buildings, the Scapa Society, and other societies were formed would best be served if there was an amalgamation of these different bodies into one organization. The prestige and resources of one widely recognized society would be greater than the sum of all the smaller activities, and might wield an authority capable of definitely setting a standard of taste, with money and power to enforce its prerogative over a wide area. *Country Life* pleads for a "Society of England," and the title suggests exactly the spirit which animates each of these societies and might hope to lead them under one banner.

*

FREE ARCHITECTURAL ADVICE

An interesting experiment is being made by the Gloucestershire Architectural Association, who have offered their advice free to those who are too poor to pay the ordinary fees of an architect. It is felt that a lot of bad work is done by people who are only too anxious to do it well, and that very often a few suggestions relating to general proportion and choice of materials are all that is needed to turn ugliness into decency. It is not intended

that the offer will extend to the preparation of any drawings or to supervision, nor hoped that architects will be giving services in expectation of a return. It is the action of men who can no longer see ugliness marching abroad when they have the means of combating it in their possession, and is perhaps one really effective way of disseminating a taste for good work in quarters where taste is most needed.

*

A PLEA FOR FLOWER-BOXES

I quite agree with Professor Reilly that we neglect one of the easiest means of brightening dull streets in not decorating our houses and business premises with window-boxes. For some reason or other the habit is rather sniffed at, as though geraniums were relegated to the order of aspidistras in the limbo of mid-Victorianism. But the window-box is good for every reason. Its dash of colour stands out against the blackness of soot so as to make nearly a virtue of this common dirt. Then, too, window-boxes and hanging baskets cannot help emphasizing the best features of a building, its windows and its doors. Just think of the buildings that would be enhanced by flower-boxes. Think of the tired-looking streets where flowers would be as welcome as water in the desert. There are whole towns where only half a dozen window sills so decorated would change the atmosphere from one of deepest gloom to comparative joy. I know of a certain drabness called Ashton Street, which stands more in need of brightening than any street I know. I wonder what kind of flowers there are there now.

*

A PEDESTRIANS' "UNDERGROUND"

The L.C.C., at a recent meeting, voted strongly in favour of the principle of uniting buildings of all descriptions by subways to underground or other railway stations. It is a suggestion that commends itself in every way, but chiefly because it will be the means of keeping pedestrian traffic underground at points where there is liable to be a deal of congestion above. The principle has, of course, been followed largely in other places, and particularly in New York, where from the Grand Central Station subways lead to buildings in all directions and to considerable distances. When it is understood that the population of several hotels and office buildings can reach their trains without touching the street pavement, it will be seen that the subway may become only a little less useful than the street. In practice the subway becomes a second street with a full equipment of shops and traffic problems of its own.

*

SAFFRON WALDEN MAZER

When Pepys "drank off a draft of drink" from a certain mazer at Saffron Walden on a February day of 1659, he was doing the trustees of the King Edward VI Almshouses in that town a better turn than he or they knew. For, ancient as the bowl was, even then, and precious, it is scarcely to be doubted that it was its association with the diarist that helped materially to put up its auction price to £2,900, last week, at Christie's. The Portland Vase cut no such figure. As the illustration shows, the chief adornment of the mazer, which is of Spanish maple, is "a picture of the Virgin and Child in her arms, done in silver," on its boss. On the silver-gilt rim is the London hall-mark, and the date, 1507.



The Saffron Walden mazer, from which Pepys once drank, sold by auction for £2,900 last week.

OLD CUPS AND CARTOGRAPHY

In a quite literal sense the whole world has been taken for the province of an exhibition of old maps and drinking glasses in the Mansard Gallery. Let us not seek too seriously the connecting link that will bring unity to such diversity. Some may be disposed to find it in the stimulus given by these exhibits to our historical sense; in the pictures they afford, on the one hand, of man laboriously piecing together his new-found knowledge of the world in which he lives, or, on the other, of his social customs in the six-bottle days of William and Mary and the Georges. Of special interest in this latter connection is the small but choice group of commemorative glasses from the collection of Mr. A. P. Milsted. Included among these examples so highly prized by the collector is one engraved with the word "Fiat." Many a surreptitious toast must have been drunk from that glass to "The King over the Water." As for the cartographers, they did their utmost to make geography a pleasant subject. Old Ortelius, who worked towards the end of the sixteenth century, may not have known a great deal about the Holy Land, and still less of the East Indies, but that he was no pedant is proved by the delightfully realistic marginal miniatures of Jonah being flung to the whale, and of those remarkably brazen mermaids gambolling in uncharted and tropic seas. Delightful, too, in its *naïveté*, is John Speed's explanation of the appearance of "Redding" in his map of Bucks—"For that Barkshire cold not contayn place for this town I have here inserted it, as one of ye most ancient and cheifest in yt coũtye."

ASTRAGAL

THE WILLIAM BOOTH MEMORIAL BUILDINGS

Denmark Hill, S.E.

Gordon and Viner, and Associated Sir Giles Gilbert Scott, Architects.

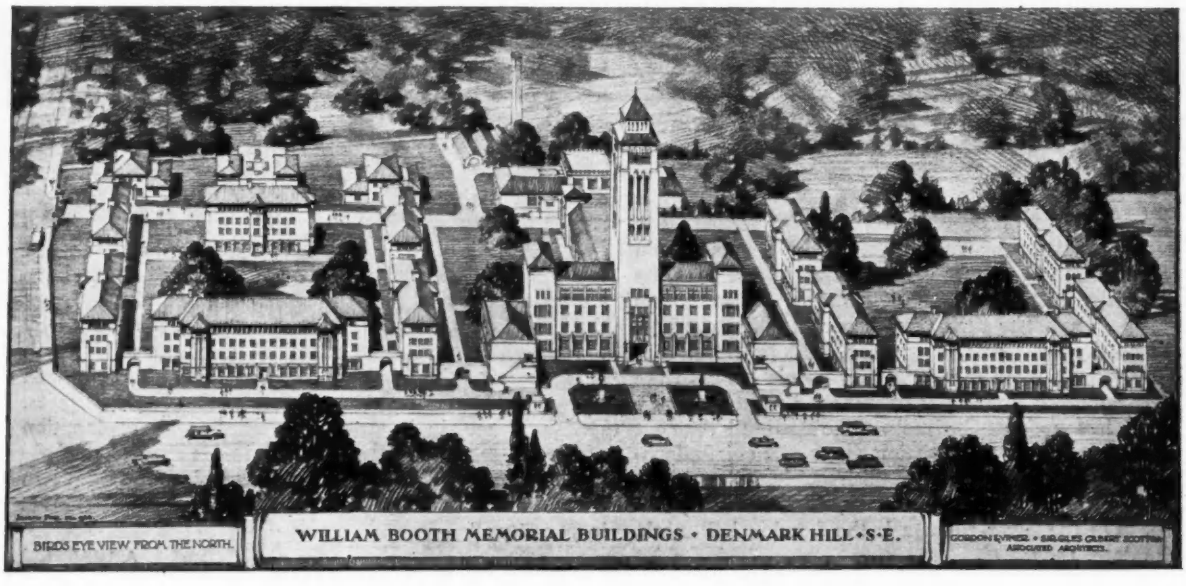
The William Booth Memorial Buildings at Denmark Hill, S.E., were officially opened by Prince George on Monday afternoon last. This has been built as a training college for cadets of the Salvation Army, and as a memorial to the founder of the "Army," General William Booth. With a frontage of 800 ft. to Champion Grove and a depth of 400 ft., it is probably the biggest training college now possessed by the Salvation Army, either in this country or abroad, and the largest block of buildings erected in London in brick for some considerable time. The memorial tower on the main administration building is still incomplete, and the presence of scaffolding made it impossible to take a satisfactory photograph. It will be 200 feet high. The illustration shows one of the lamps which stand on pylons at the exterior of the main entrance.

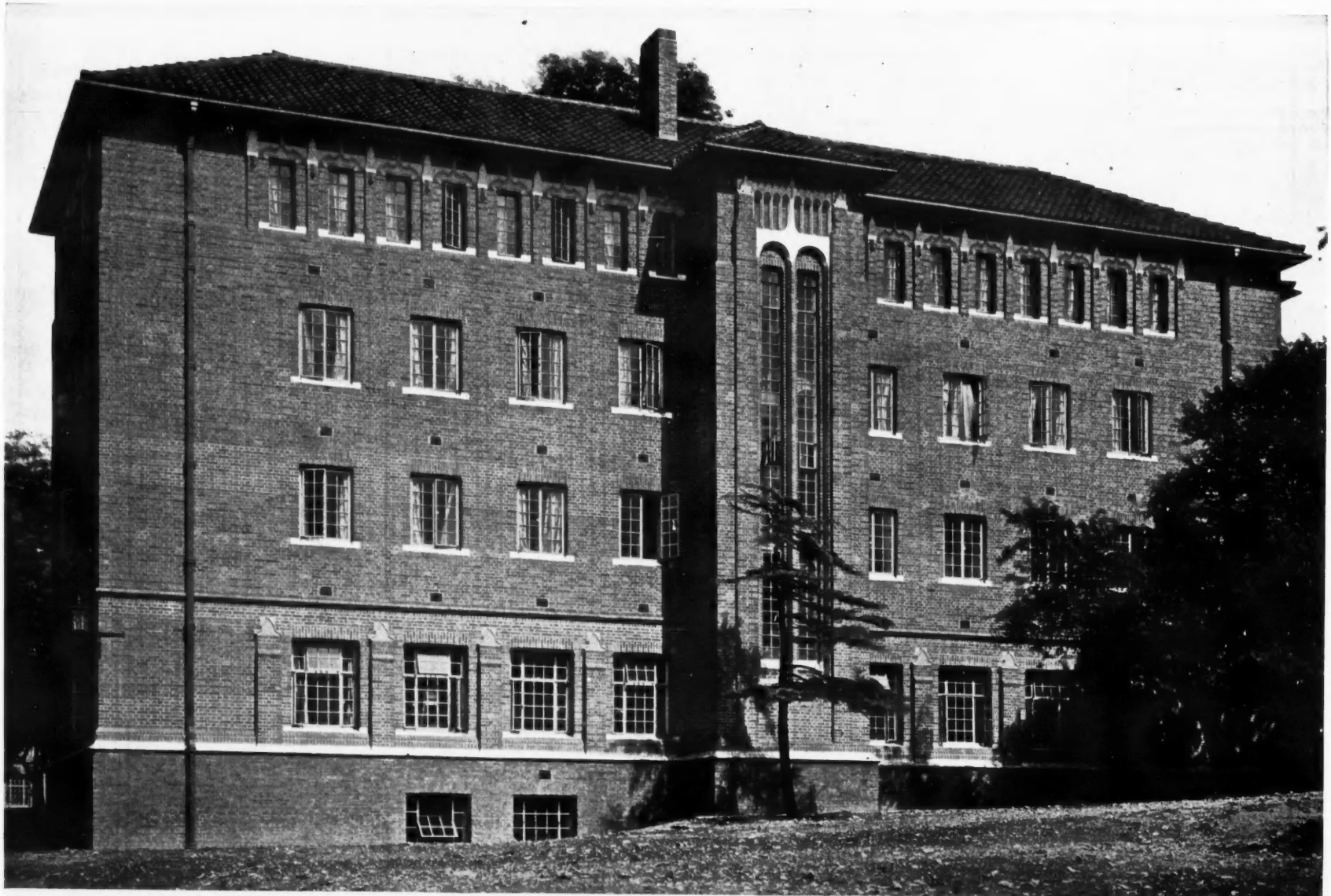


THE new training college consists of a main or administration building facing Champion Grove; connected at the back to an assembly hall to seat 1,000 persons; and flanked on each side by two quadrangles, around which are grouped the hostels. At the rear of the assembly hall, and running parallel to Champion Grove, is a main avenue. Along this avenue is the dining-hall, a building consisting of two large dining-rooms for the male and female cadets respectively, and smaller dining-rooms for the officers, etc. Along this main avenue also are two sick homes, one for each sex, planned on the lines of a cottage hospital; and a hydropathic hospital. Still farther to the rear of the site is the boiler-house. The site has a fall of 40 ft. from back to front. In planning the various buildings great care has been taken by the architects to preserve the fine old trees.

The entrance hall to the administration building has been designed practically as a small memorial hall, and on the walls are six tablets laid by admirers of the founder's work. The floor of this hall is laid with marble with a carpet pattern dado similar to that laid in Liverpool Cathedral. The walls are lined with terrazzo, the lift gates are of bronze, and the ceiling is picked out in colour. On either side of the entrance hall are classrooms and lecture halls. On the first floor are the General's and other offices and two large lecture halls, and an open access library with two reading-rooms, one for each sex. On the second floor are offices, and on the third small flats for the use of the resident officers.

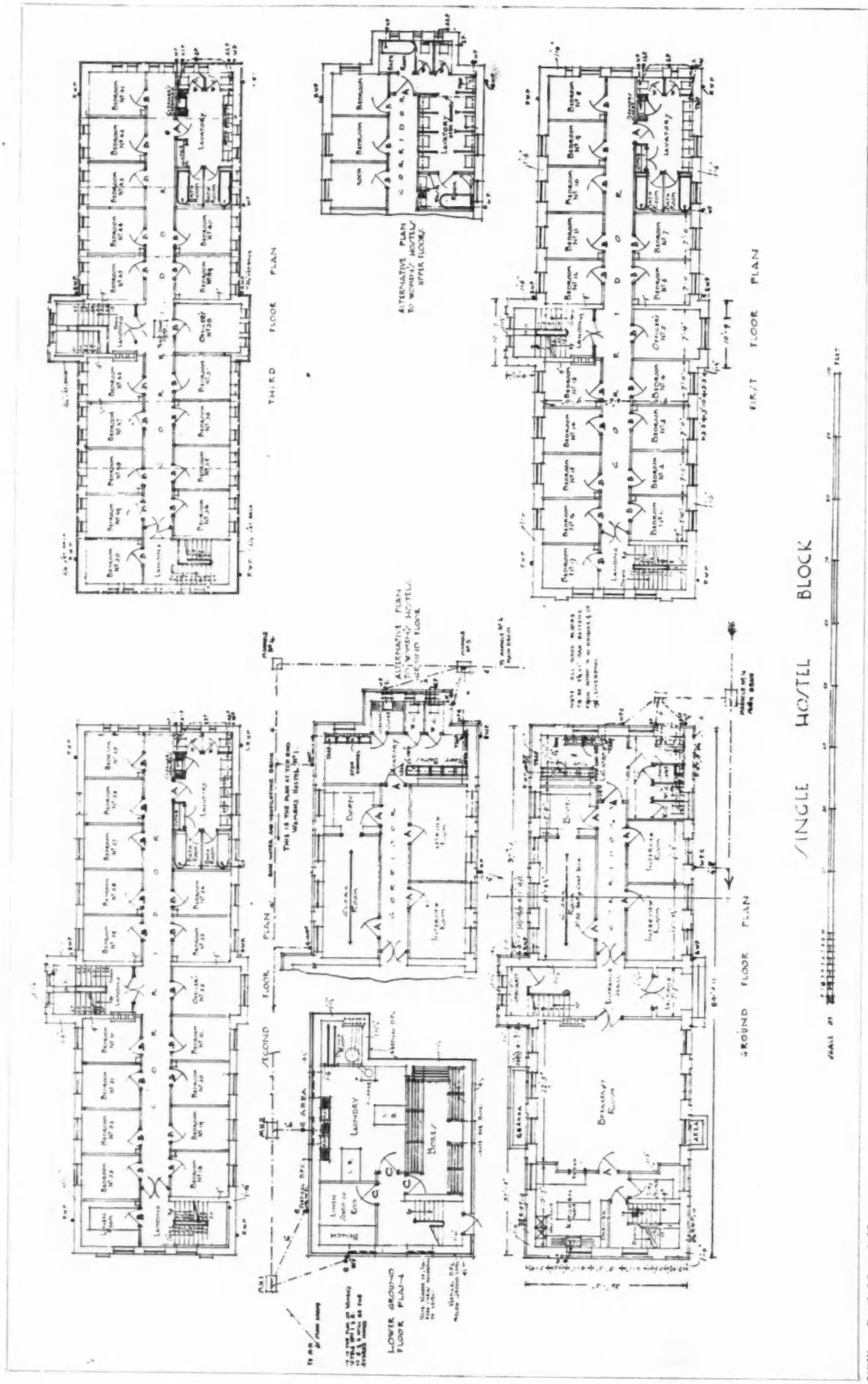
The memorial tower on the administration building is 35 ft. sq. and will rise to a height of 200 ft. At the moment it is incomplete, and has to be taken up something like another 20 ft. The tower made the question of foundations a serious one, as it faces a railway embankment. After consultation with the London County Council and the consideration of many schemes it was eventually decided, owing to the treacherous nature of the clay subsoil, to sink the foundations for the tower to a depth of about 40 ft. below the ground.





William Booth Memorial.] [*Gordon and Viner, and Sir Giles Gilbert Scott, Associated Architects.*

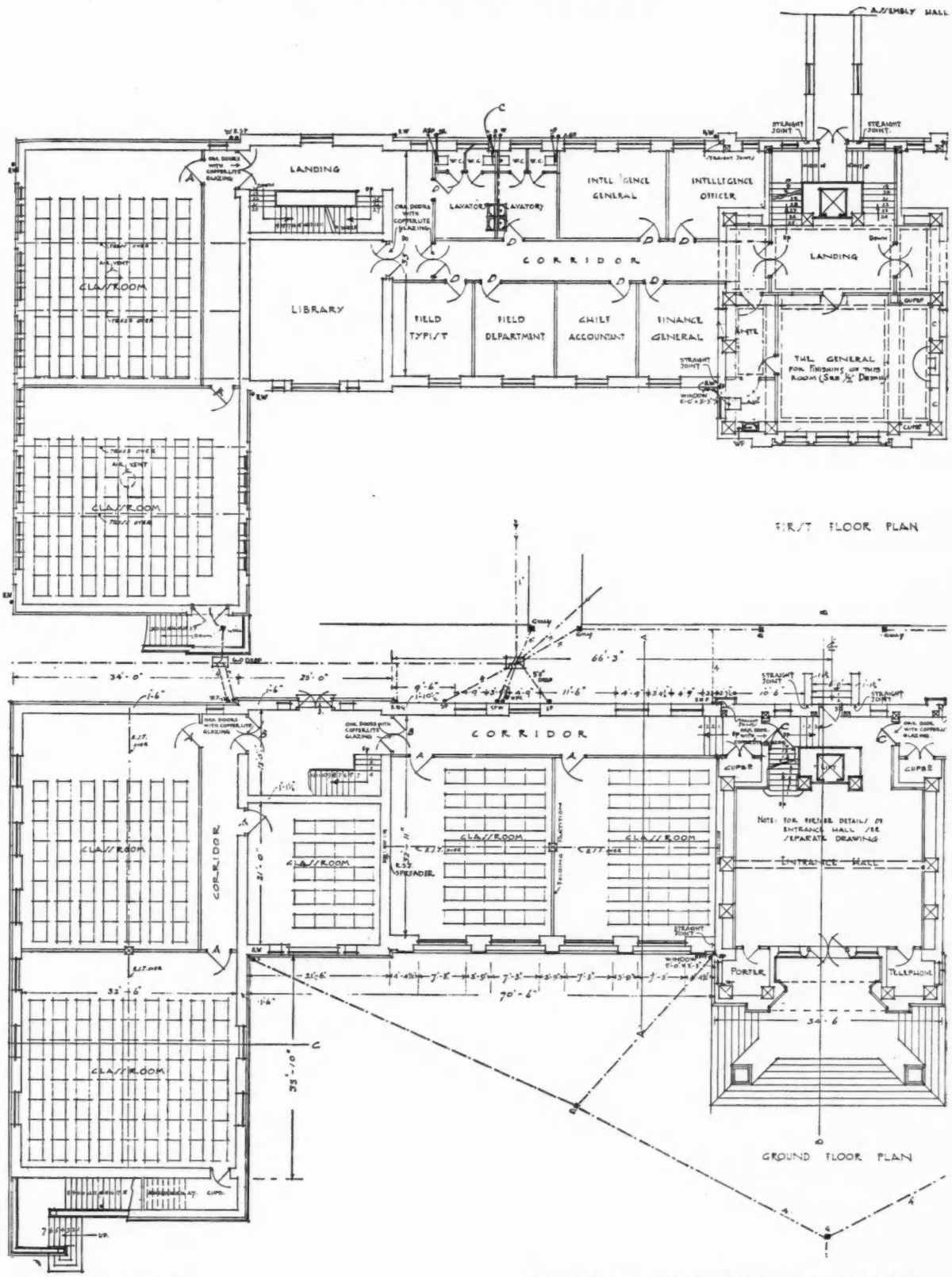
The rear façade of one of the single hostels. Note the treatment of the windows of the principal staircase. There are five single hostels and one double hostel for the female cadets, built round a quadrangle on the left side of the administration building. Eventually similar hostels will be provided on the right of the administration building for the male cadets, but at the moment only two of the hostels are complete.



William Booth Memorial.]

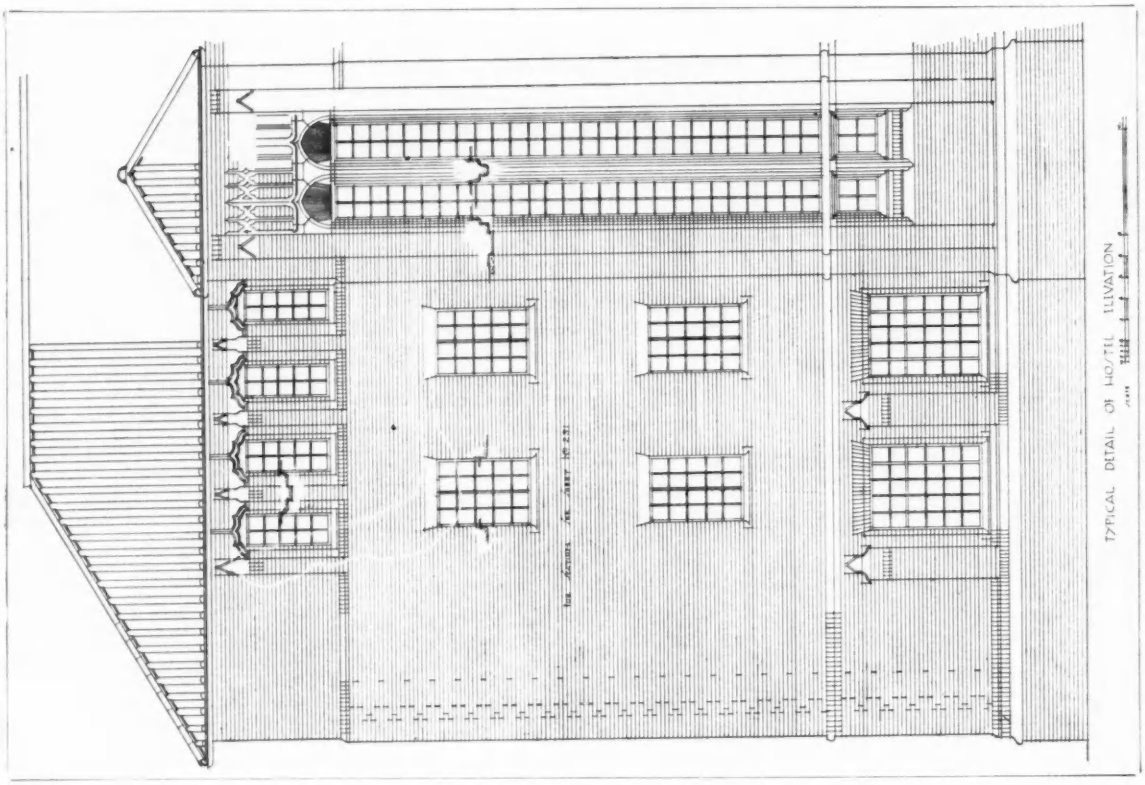
[*Gordon and Viner, and Sir Giles Gilbert Scott, Associated Architects*

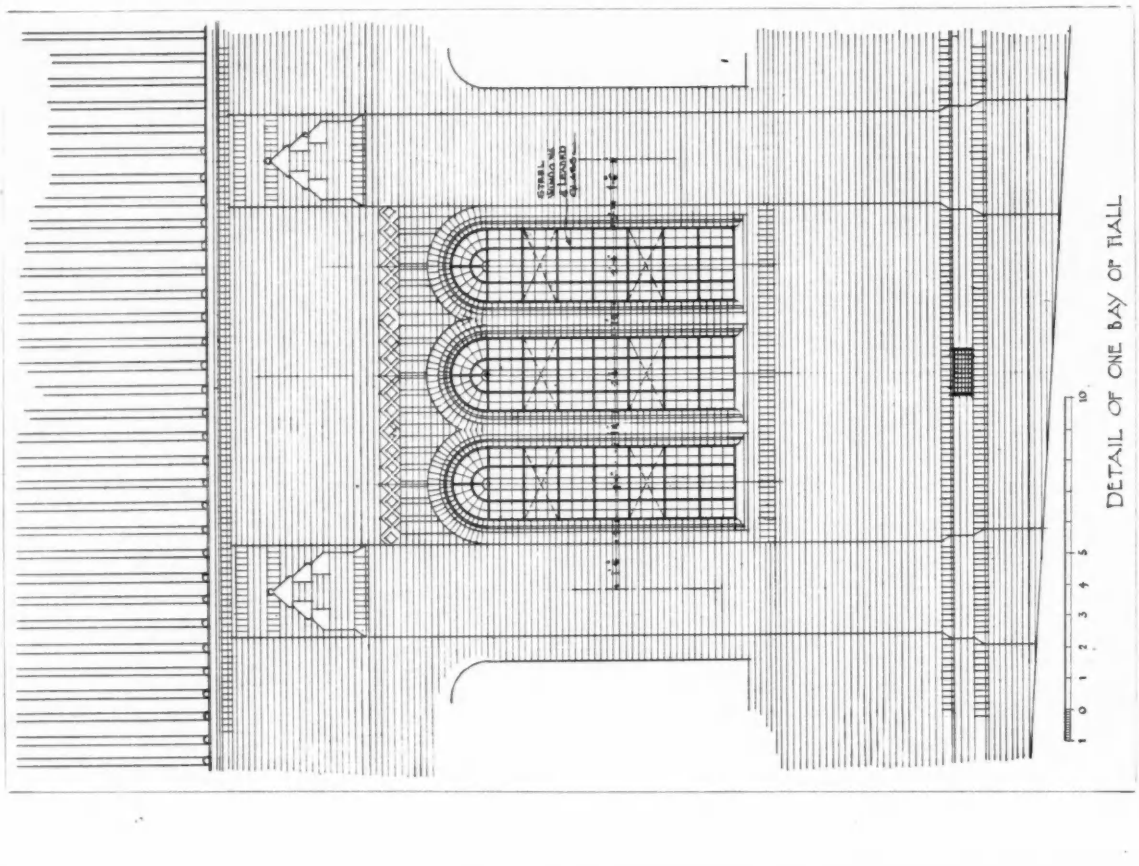
The hostels, like the remainder of the college, are planned on the most modern lines. The accommodation in each hostel, as will be seen from these plans of a single block, includes a common room with a kitchen attached, a cloakroom with hot-water pipes for drying clothes, a boot room, and foot-baths. On the upper floor are cubicle bedrooms.



William Booth Memorial.] [*Gordon and Viner, and Sir Giles Gilbert Scott, Associated Architects.*

The main, or administration, building the left half plan of which is reproduced, contains the entrance memorial hall, classrooms, lecture halls, libraries, the General's and other offices. On the walls of the entrance hall are tablets laid by admirers of the work of General William Booth.

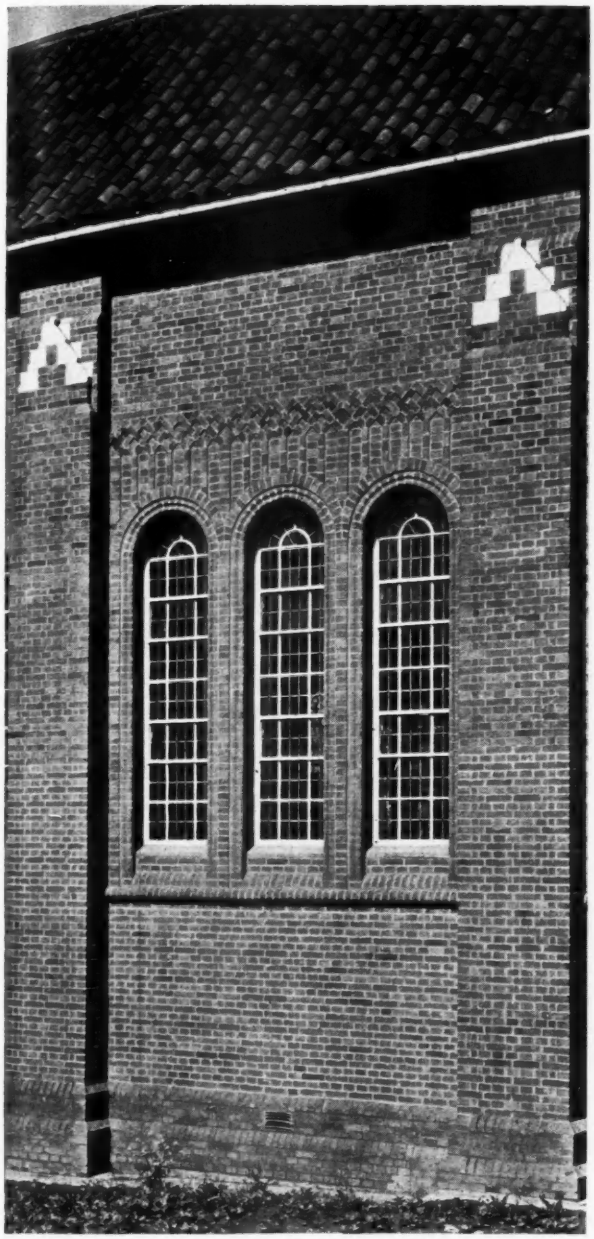




[Gordon and Viner, and Sir Giles Gilbert Scott, Associated Architects. William Booth Memorial.]

These architects' drawings, showing respectively the windows of the assembly hall and a typical detail of a hostel, should be compared with the photographs on page 47 and on the facing page.

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William Booth Memorial.]



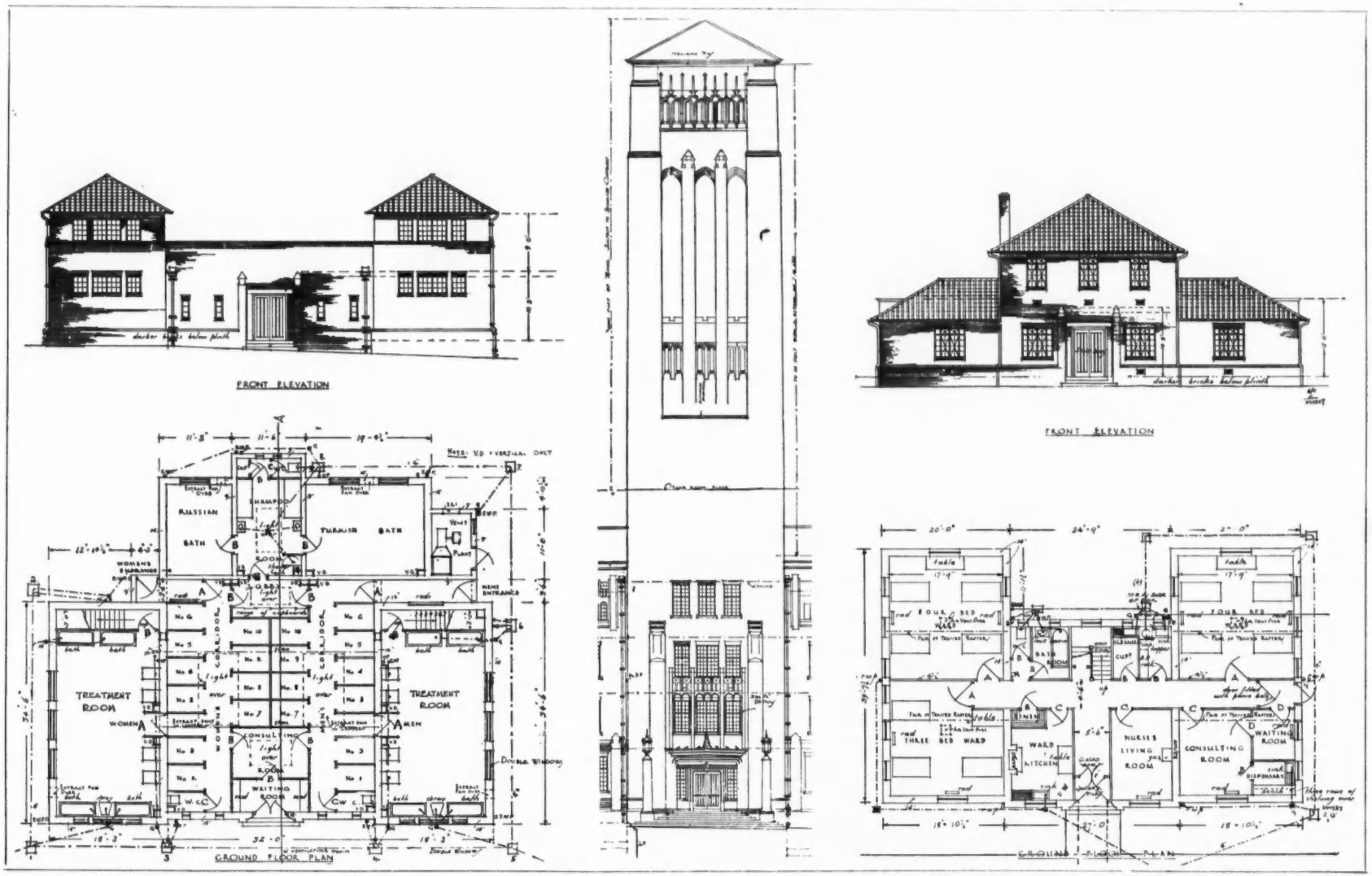
[Gordon and Viner and Sir Giles Gilbert Scott, Associated Architects.

Details of the windows of the assembly hall, and an entrance door to a hostel. The whole of the buildings on the site are faced with 2 in. rough-faced maroon-coloured bricks, and have stone dressings.

The hostels for the women are built round a quadrangle to the left of the administration building. There are five single hostels, and one double hostel facing Champion Grove. Those for the male cadets are on the opposite side of the administration building. Two only of these hostels have yet been built, but when completed they will form a similar quadrangle to that for the women. Each of the hostels has a common room with a kitchen attached, a cloakroom with racks fitted with hot-water pipes for drying clothes, a boot room, lavatory basins, w.c.'s, and foot baths. Upstairs are cubical bedrooms for the cadets. Installed in each hospital is a small modern-equipped laundry.

The hydro is planned and equipped, like every other portion of the scheme, on the most modern lines, and provision is made for Russian and Turkish baths, electrical and other treatment.

The elevations of the whole of the buildings are faced with 2 in. rough-faced maroon-coloured bricks, bedded in mortar with the joints wiped off with a sack. The dressings are of stone, and the roofs are covered with small Lombardic tiles. The window sashes are in iron, and are divided into small squares of uniform size, thus giving scale and unity to the entire scheme, which is in reality built up on these as units.

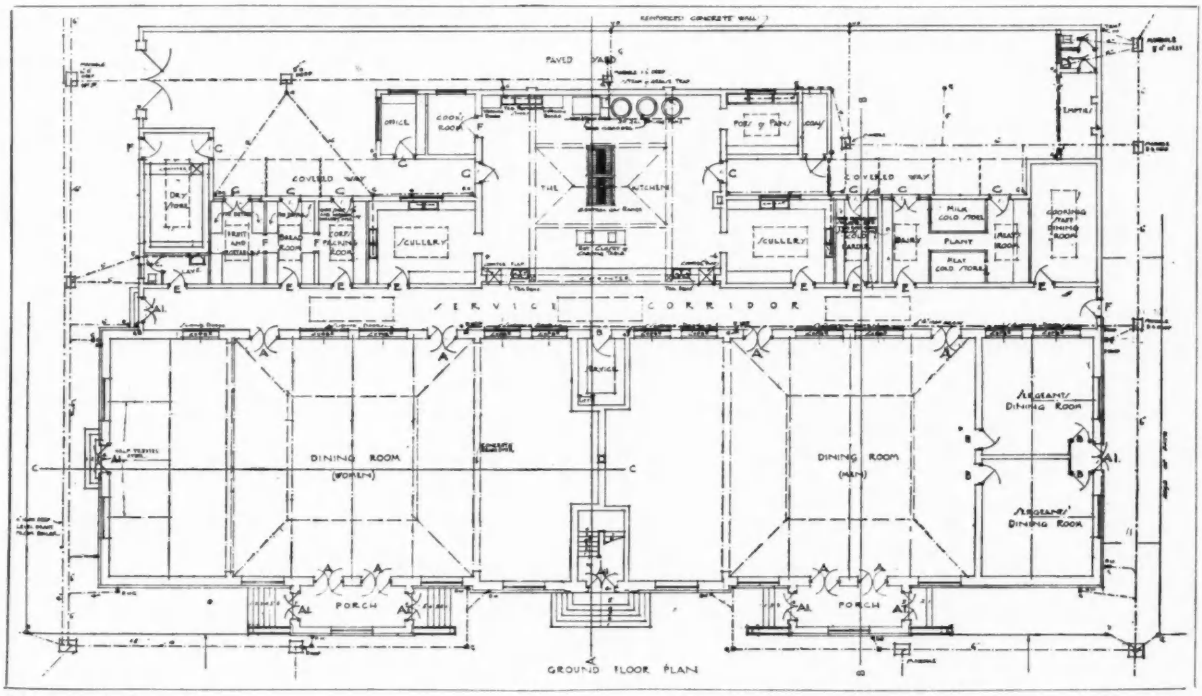


William Booth Memorial.] [*Gordon and Viner, and Sir Giles Gilbert Scott, Associated Architects.*

The hydro, elevation of tower on administration building, and one of the hospitals. The Salvation Army are great believers in hydropathic treatment, which they have practised with success for many years. There are two hospitals, one for male and one for female cadets, similar in plan and elevation to that shown.



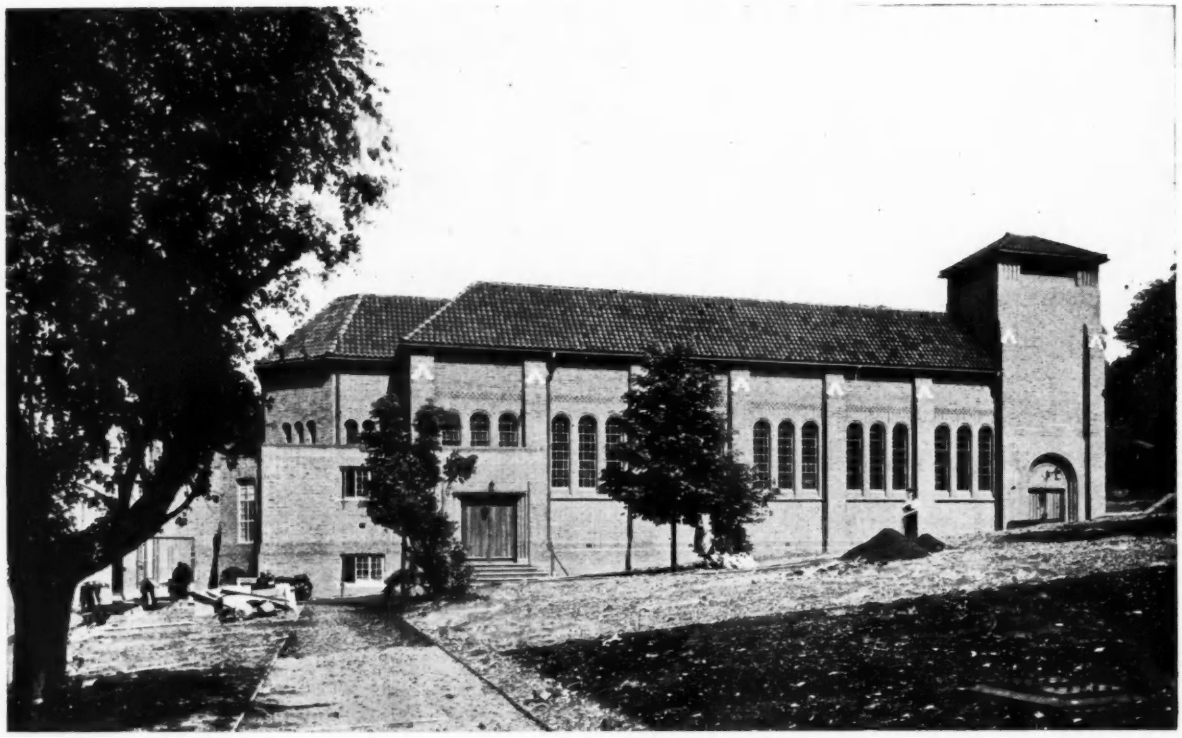
The main front of one of the hospitals. Each contains three four-bed wards, doctor's room, sister's room, patients' bath-room, dispensary, and other accommodation, planned on the lines of a modern cottage hospital.



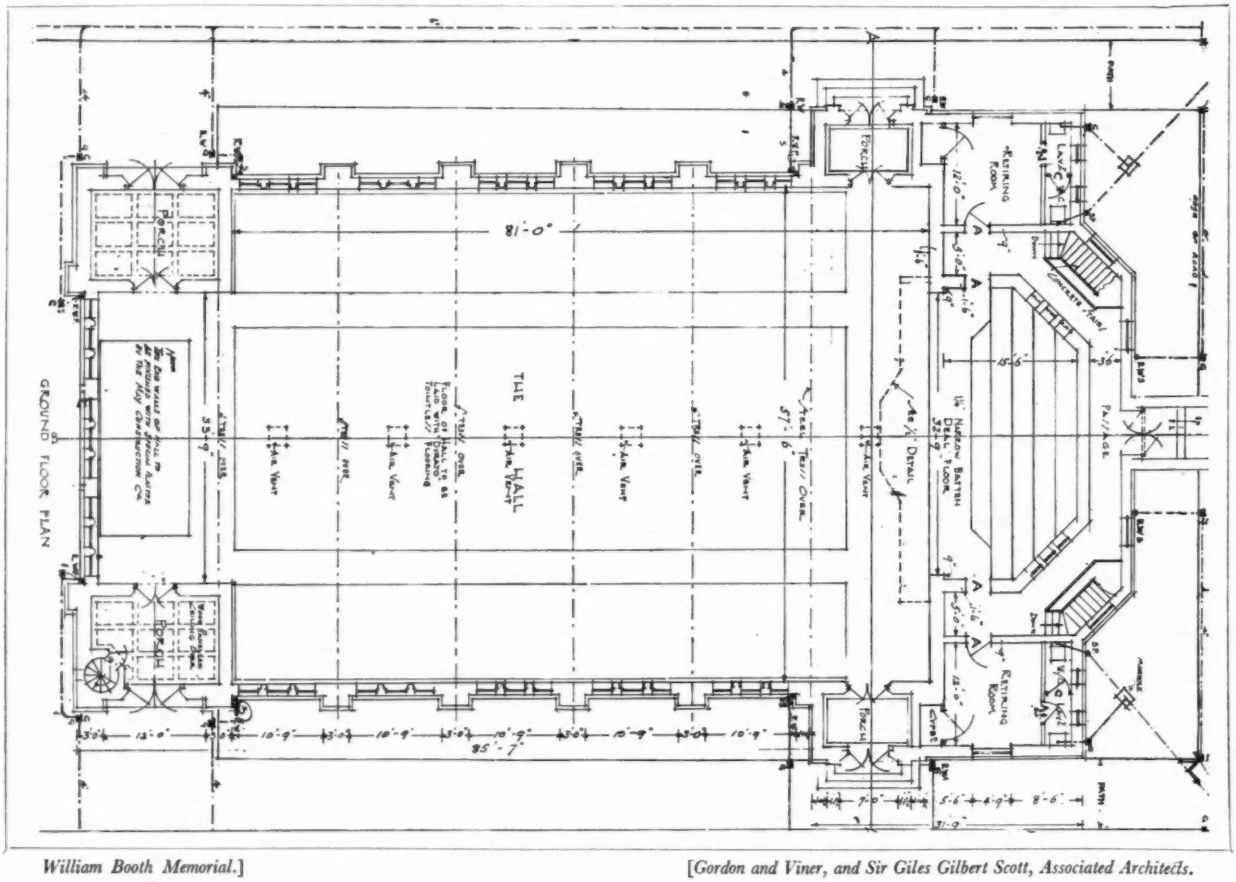
William Booth Memorial.] [*Gordon and Viner, and Sir Giles Gilbert Scott, Associated Architects.*

The dining hall provides seating accommodation for 250 men and 350 women in two separate rooms. On the upper floors are officers' dining-rooms. Modern cooking and washing appliances are installed. The plan gives direct delivery of goods to the stores under the supervision of a storekeeper.

pathic treatment, which they have practised with success for many years. There are two hospitals, one for male and one for female cadets, similar in plan and elevation to that shown.



Photograph of the assembly hall taken from the west. In the plan of the building, below, north is to the right.



William Booth Memorial.] [*Gordon and Viner, and Sir Giles Gilbert Scott, Associated Architects.*

The assembly hall stands immediately behind the centre of the main administration building. It provides seating accommodation for 1,000 persons, and in the basement are band practice and music rooms. There are four entrances with porches, those from the main avenue being approached by bold flights of brick steps.



ENGLISH PRECEDENT No. 72

HOUSE AT LOWER AMESBURY, NEAR SALISBURY.

Chequered walls—alternate squares of stone and flint filling—are found in Wiltshire and other southern counties, as well as in East Anglia. The suggestion that flints were so used to economize stone is untenable ; chequerwork, like its higher development, flint panel work, was devised for effect.

The elevation illustrated stands on the road (little frequented in the seventeenth century) ; the gate piers opposite play an important part in its composition, conferring, as they do, some importance upon what, without them, would be merely a wayside house. The use of brick for chimneys is a common tribute to the convenience of brick as a unit, causing it frequently to be used for chimney shafts on buildings otherwise built entirely of stone. Although the windows are of the mullioned type, a concession has been made to " the new taste " by furnishing them with architraves, but the mullions themselves are splayed, just as they would have been three hundred years earlier. The narrow and severe doorway is now furnished with a door which, though pleasing of its kind, is too slight for the entrance and, no doubt, replaces one of oak, of more substantial and virile character, contemporary with the building.

—[NATHANIEL LLOYD.]

UNITARIAN MEMORIAL CHURCH, CAMBRIDGE

DESIGNED BY RONALD P. JONES

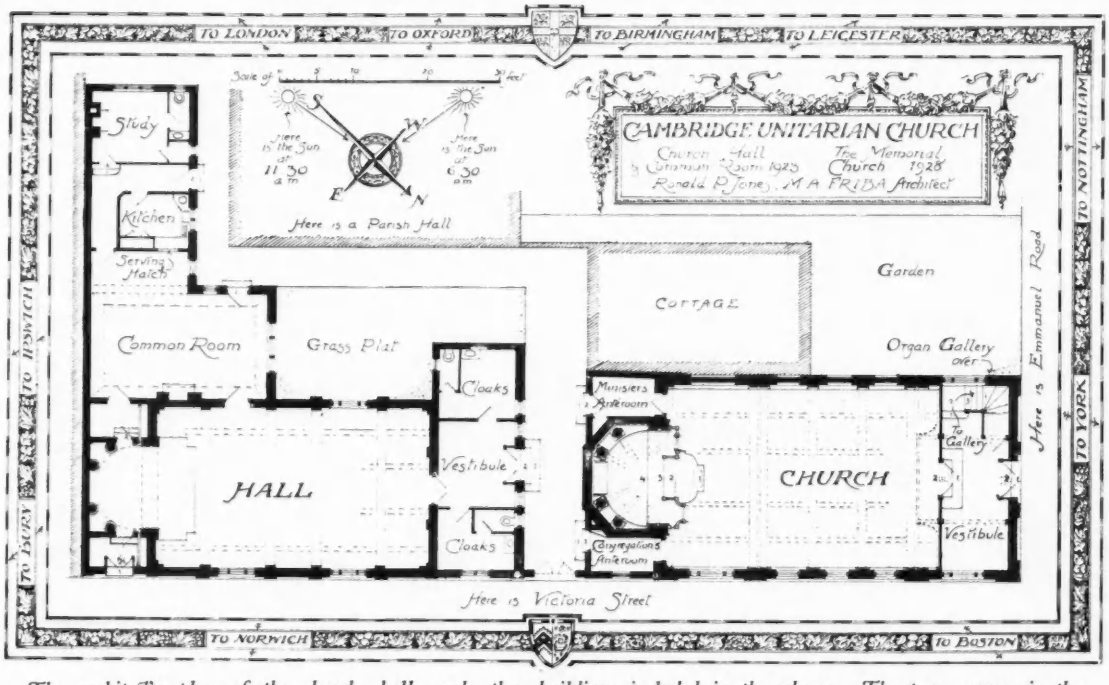


A view of the exterior of the church from the north-east. The general design follows the scope of the usual college chapel, and the tradition of the group of Unitarian chapels in East Anglia. In particular the windows of one of these, the historic meeting-house at Bury St. Edmund's, have suggested similar treatment here. The interior is schemed in accordance with the architect's own published theories on Nonconformist church architecture. The buildings were erected and endowed as a memorial to the donor's daughter, at the expense of Mr. G. W. Brown.

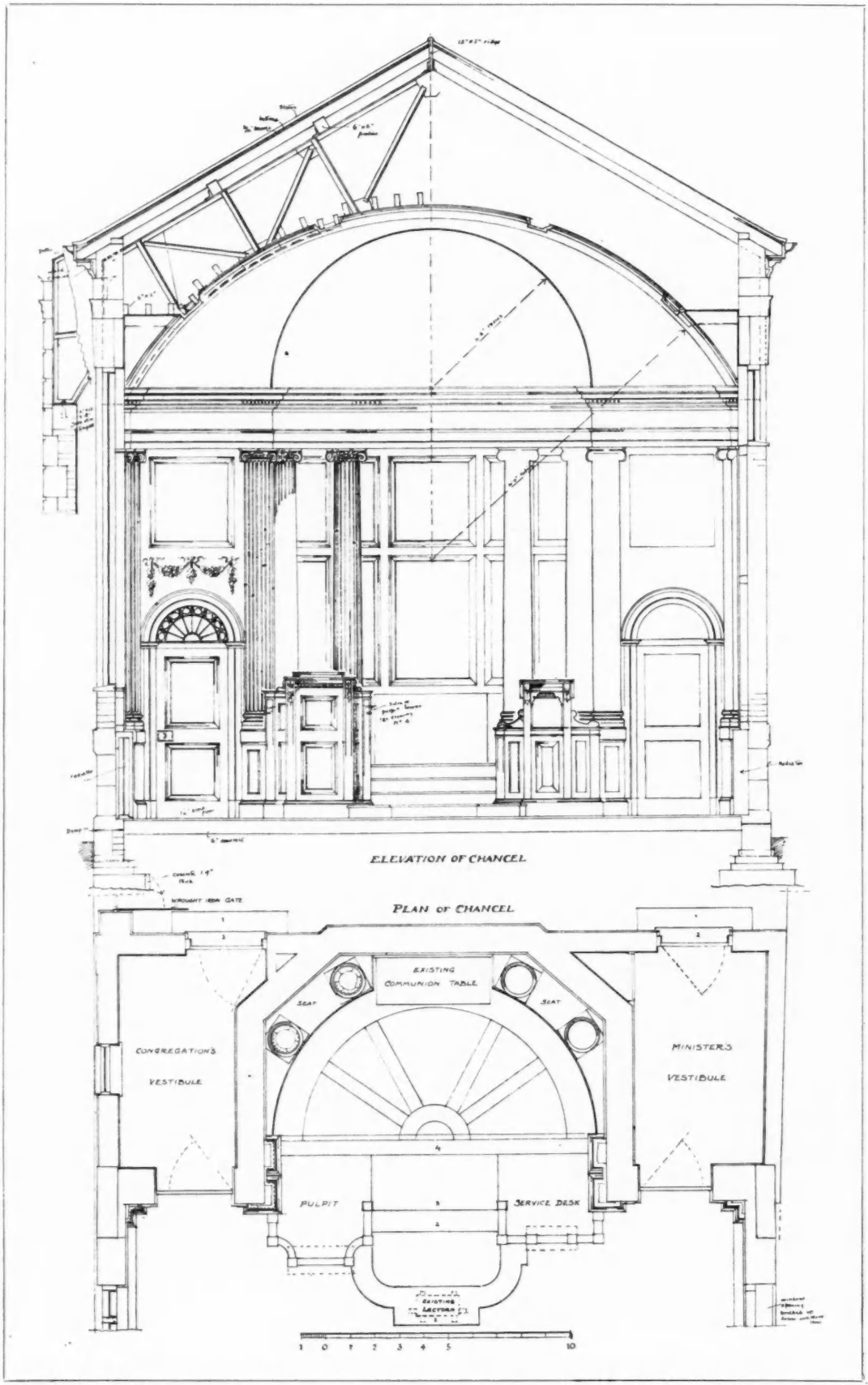
THE exterior of this memorial church is carried out in the same variety of bricks, of a plum colour, as the adjacent church hall, previously erected in 1922, and has stone facings. The soft cream-coloured limestone that is renowned for its weathering properties in Cambridge has been employed. At the chancel end the treatment is in brick and roughcast, to harmonize with the hall.

Internally this south-eastern end of the church is constructed with a raised semicircular pavement, occupied by the communion table. Reading-desk and pulpit stand at the two corners, and the brass lectern rests centrally on the lowest of the chancel steps, which is extended to form a platform for it. The whole interior is panelled in oak, the salient parts being adorned with carving. A pilaster treatment is adopted in the main body of the church and detached columns in the chancel, all raised on a continuous dado having recesses for heating radiators. The curved ceiling is in fibrous plaster, panelled and enriched. For the chancel steps marble panels—dark green verte antique and grey-green cipollino—have been halved and laid in symmetrical patterns.

No visible windows face the congregation, but the semi-dome of the chancel has small concealed side windows above the cornice, reflecting their light by day and that of tubular electric lamps by night.



The architect's plan of the church, hall, and other buildings included in the scheme. The town names in the decorative border indicate the directions of other historic Unitarian churches. They are not necessarily the nearest churches in those directions.

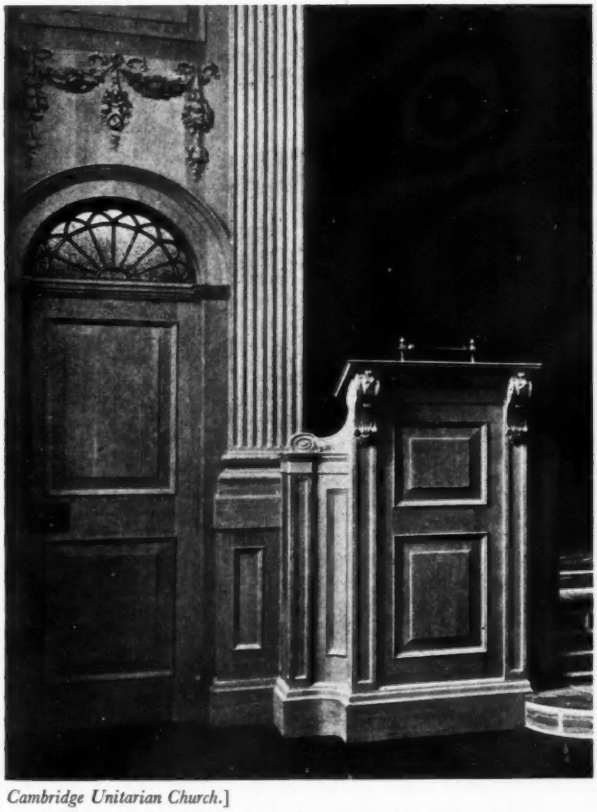


Cambridge Unitarian Church.] [*By Ronald P. Jones.*

Detail drawings of the plan and elevation of the chancel, illustrated on the facing page.

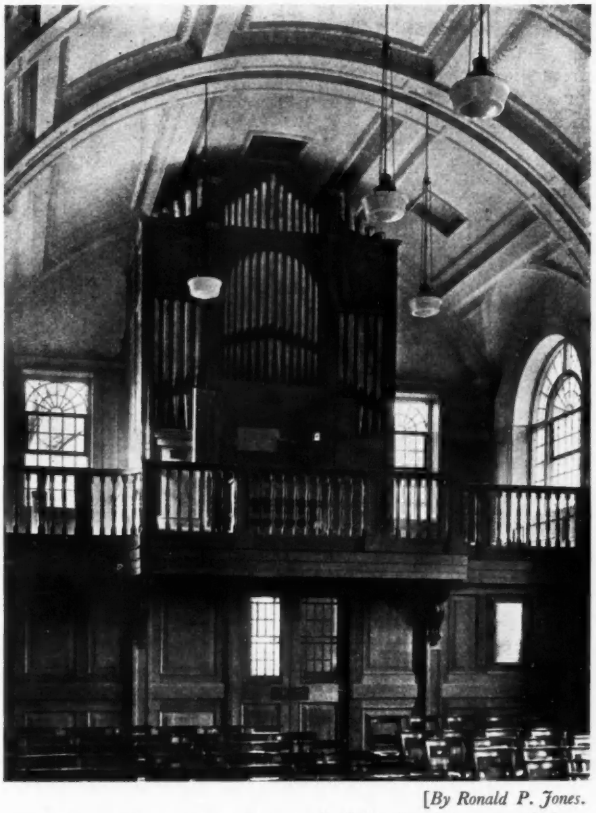


An interior view of the church, looking towards the chancel. Externally this end of the building takes the form of an apse, crowned with a semi-dome, having small concealed windows. The memorial tablet is seen on the extreme right.



Cambridge Unitarian Church.]

The carved pulpit and the doorway to the congregation's ante-room, with fanlight surmounted by wood carving.



[By Ronald P. Jones.

At the north-west or entrance end of the church is a vestibule, with, above it, the organ gallery, giving additional seating.

ARCHITECTS' FEES

When Should Accounts be Rendered?

Following are further views of some prominent architects with regard to the best practice to adopt in sending in accounts for fees. The correspondence began in earnest in last week's issue and arose out of the remarks by Karshish on June 19 in "The Honeywood File" that when dealing with a private person the architect should wait until he is invited to send in his account.

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I am much enjoying the weekly unfolding by Karshish of this revealing file which is so full of good things and skilfully recounts the trials of our Brashes and Spinloves. Karshish has, however, struck it unlucky in the matter of Spinlove's fees, and I do not understand how his researches could lead him to think that architects need be apologetic or snobbish in these matters. If his ideas are shared by the profession—and one cannot credit this—it may account for the fact that the public, including so many of our respected clients, have such a poor opinion of us!

This old notion about waiting for our hard-earned "dibs" until someone is graciously pleased to send, or cause to be sent, a remittance, is surely a survival from the days when architects were "clerks" of works or estates, "hangers-on," living in the shadow of the great or of the merely affluent. Ground landlords, the clergy in their many temporal affairs, apart from mere professional men like doctors or solicitors, do not usually lack promptness in rendering their own accounts, so why on earth should we? Or do we prefer to emulate the tradesmen whom etiquette forbids to send in accounts to "Royalty, Nobility, and Gentry," as we used to be told?

No, no, Karshish, this won't do!

T. ALWYN LLOYD

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Spinlove has certainly old die-hard ideas of etiquette that hardly apply in this present age, when it is universally accepted that everyone in trade or profession is worthy of his hire.

It is, however, rather a delicate undertaking to obtain fees on account from a client, as the latter does not usually fully appreciate that, when the contract is signed, the greater part of an architect's work is completed and that he is entitled to two-thirds of his fees on account. I do not see how one can expect a client to understand this—my experience is that until the bricks and mortar commence to evolve some tangible shape he naturally cannot see any justification for fees. At the same time, the R.I.B.A. scale of charges clearly lays down the rule that the architect becomes entitled to two-thirds of his fees upon the signing of the contract, and if the architect can obtain this without annoying his client, I think he is entitled to do so.

In these sorts of cases, why not write a diplomatic letter pointing out that under the scale of charges two-thirds of the fees are now due, and definitely stating that the greater part of the architectural work has already been done, but suggesting to the client that if convenient he should send a cheque for a round sum a little below that amount?

I would, however, strongly suggest that such a letter should not be contemplated until the work is actually commenced and showing some tangible form.

I think that in this manner such a letter would take the edge off the client's surprise at being asked for fees before he really imagined fees were due.

JOHN D. CLARKE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I agree with "I. C. Cashdown," that Karshish is wrong in suggesting humbly waiting for the client to ask about the fees.

I believe the best way is to wait until the job is going well, and then while the going is good pop in the little bill. Never let the letter about fees arrive by the breakfast post.

HOWARD ROBERTSON

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I quite agree with "I. C. Cashdown," and think that the regulations governing fees as laid down by the R.I.B.A. should be observed, and that arrangements should be made with the client that payment of fees should be on these lines, a quite straightforward business arrangement.

D. RAESIDE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I am very strongly of opinion that, whoever the client may be and however exalted his rank, there is only one way of dealing with fees and an architect's remuneration, and that is by strict adherence to the R.I.B.A. scale of charges and methods of payments.

I agree with "I. C. Cashdown" that the day for consideration of the feelings of the aristocracy on the old sentimental lines in matters of business is past; if they employ a professional man to work for them they ought to understand that he will require payment for his labours, and that promptly.

The mistake made by Spinlove was apparently in not informing his client that his charges would be in accordance with the R.I.B.A. schedule, and on the acceptance of the estimate or signing of the contract he should have forwarded his account as a matter of form, without asking if it "would be convenient"; for if a client is able to meet the payments to contractor on certificates, surely he is able to pay the architect.

The sooner architects learn to deal with their clients' affairs in a business-like way and not parade the artistic temperament to the exclusion of fees, the more confidence the clients will have in them.

T. TALIESIN REES

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I would like to say how I appreciate Karshish's articles on "The Honeywood File." Many of the situations mentioned I have met in practice and some of them I feel I met wrongly and tactlessly as our friend Spinlove did. Bloggs' letter in this number[1] is a gem.

I had not heard of Karshish till I recently started taking your JOURNAL—but I wish I had.

A. J. MCLEAN

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—We are only too delighted to get fees, whether with ceremony or without!

Personally I find the easiest method is to send a little note of the fees due on each certificate. This avoids asking for a big payment of half the fees when the contract is signed, which a good many clients object to, and it also compares favourably with the very much larger amounts paid to the contractor at the same time.

F.R.I.B.A.

[1] Issue of June 26.

FROM THE SCHOOLS

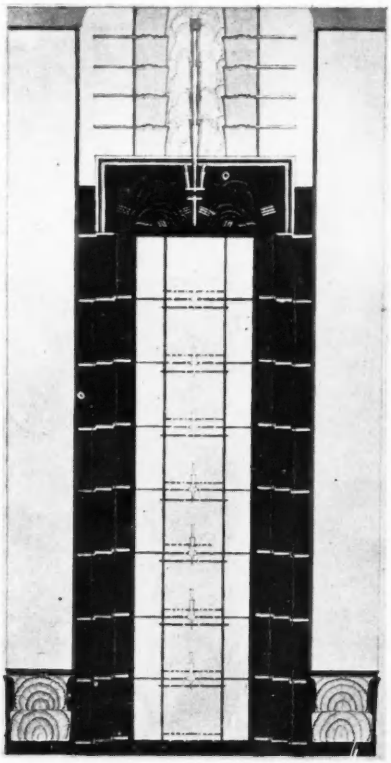
Some Students' Work in Annual Exhibitions

WITH A MORAL

BY E. MAXWELL FRY

From among the numerous examples of students' work in the annual exhibitions of the Architectural Association, and the Schools of Architecture of the Universities of Liverpool and London, a dozen drawings have been chosen for illustration. It will be noted that the schools are represented in alphabetical order; it may be added that neither the inclusion of these subjects, nor the exclusion of others, is intended to convey any implication whatever concerning their relative merits. The adjoining design is for a decorative panel in the reception-room of a broadcasting station, and is by D. R. Burles of the Architectural Association.

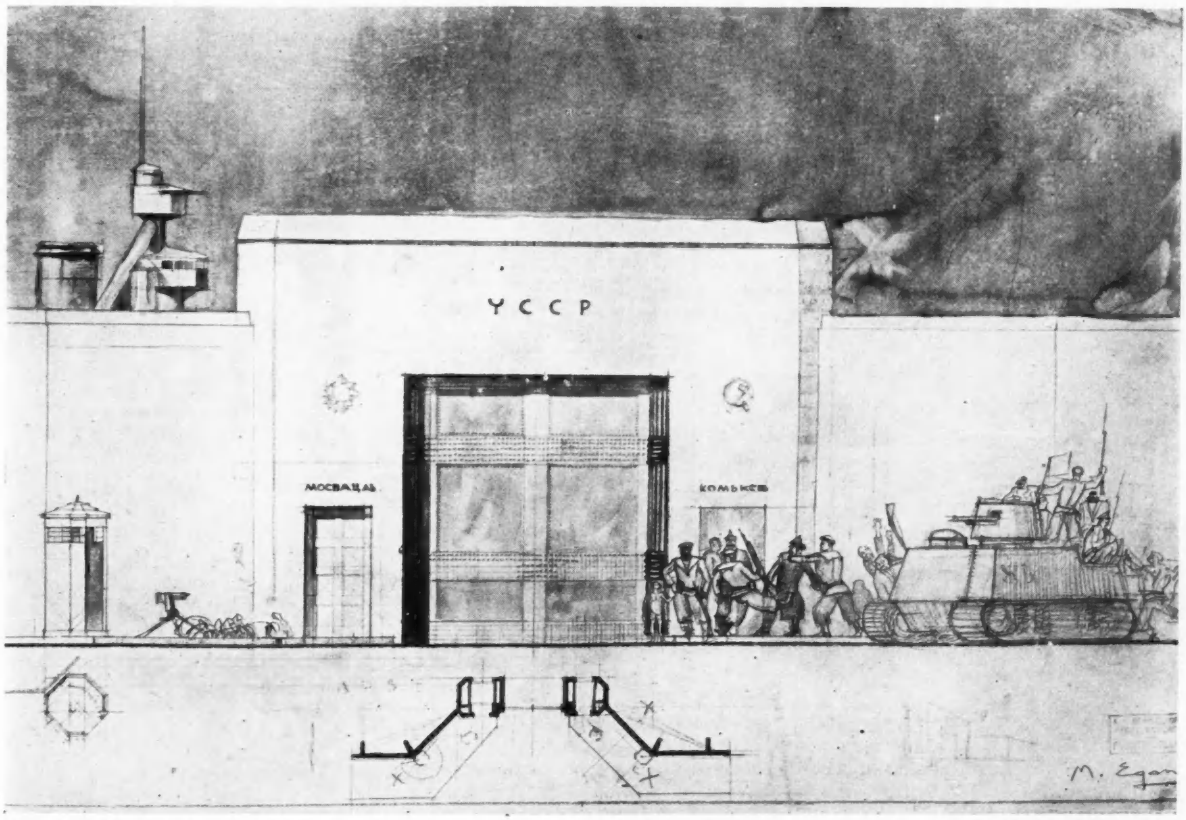
THE work of the schools today, as evidenced in the typical drawings reproduced with this article, seems to have assimilated the modern outlook as the stimulus to its best efforts. This is shown as much by the re-orientation of the ideas of architectural training as by the natural aptitude of students to become excited by what is going on in the world around them. It has been a growing tendency in those who teach to train students' minds to architecture rather than to impose the rules of a fixed style as a complete equipment with which to face the world.



Architectural Assn.] [*Year v.*

There was a time when it might be said with truth that a close study of the orders and of the best buildings of Greece and Rome might fit a man to be an architect; but the same is not true today, because vitality has forsaken the orders; teachers will not be enthusiastic over them, nor students receptive; and it is obviously not worth teaching without enthusiasm.

The Liverpool School, in appropriating the best work of modern American architecture to be its exemplar, provoked again the sources of the monumental manner by offering for close study buildings worthy of such study.



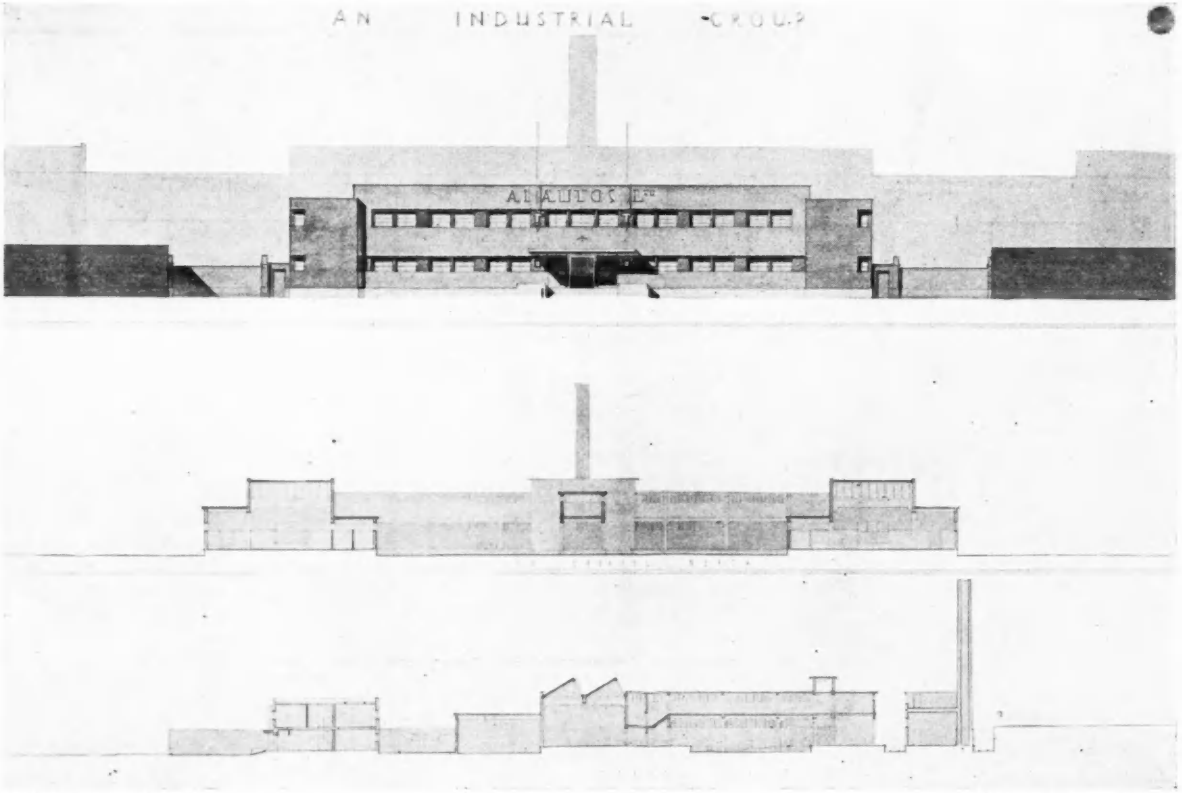
Architectural Association.] [*By M. Egan: Year iv.*

An arsenal entrance gateway: twelve-hour sketch.



Architectural Association.] [*By J. Atkinson : Year ii.*

Isometric sketch of a market hall.



Architectural Association.] [*By D. E. Barry : Year v.*

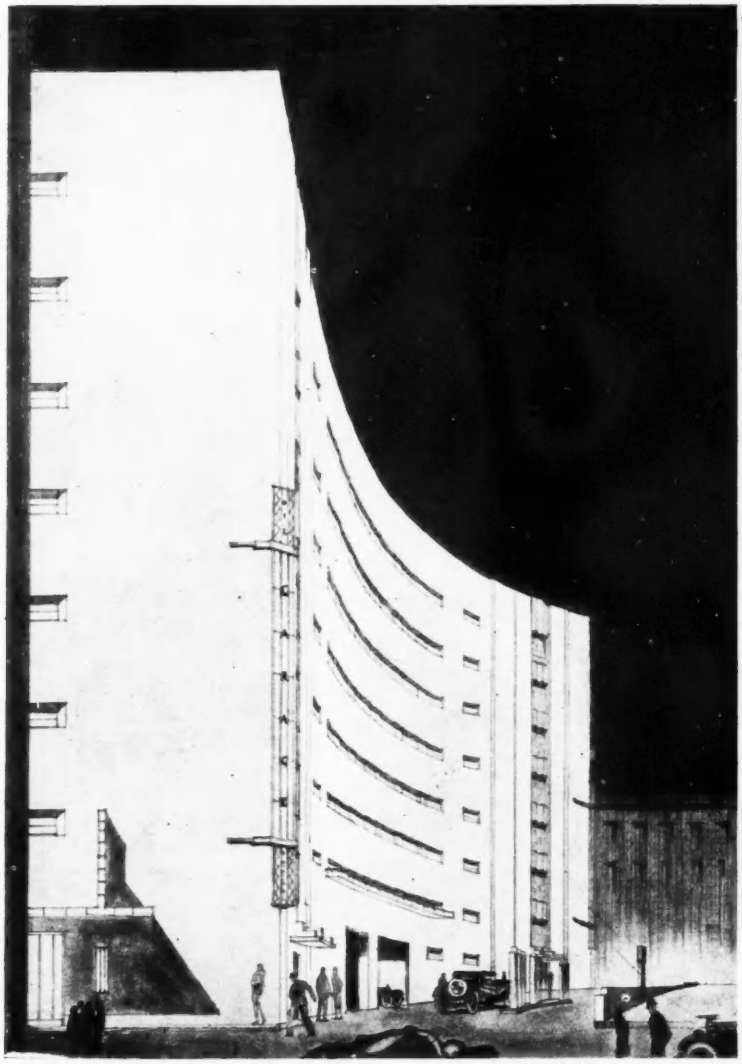
An industrial group, elevation to road, and sections looking north and west : four-week subject.

Architecture proceeds in a series of renaissances as the virtues of past styles are suddenly revealed, and no amount of picking and choosing, nor any system of mind-training, can hope to produce the flash of intelligence that lights the mind of a man who discovers and is moved by his discovery.

Remembering this, we shall not forget how much of our present attitude towards architecture is governed by what we have borrowed from America, nor by how much the system of training has been enriched thereby.

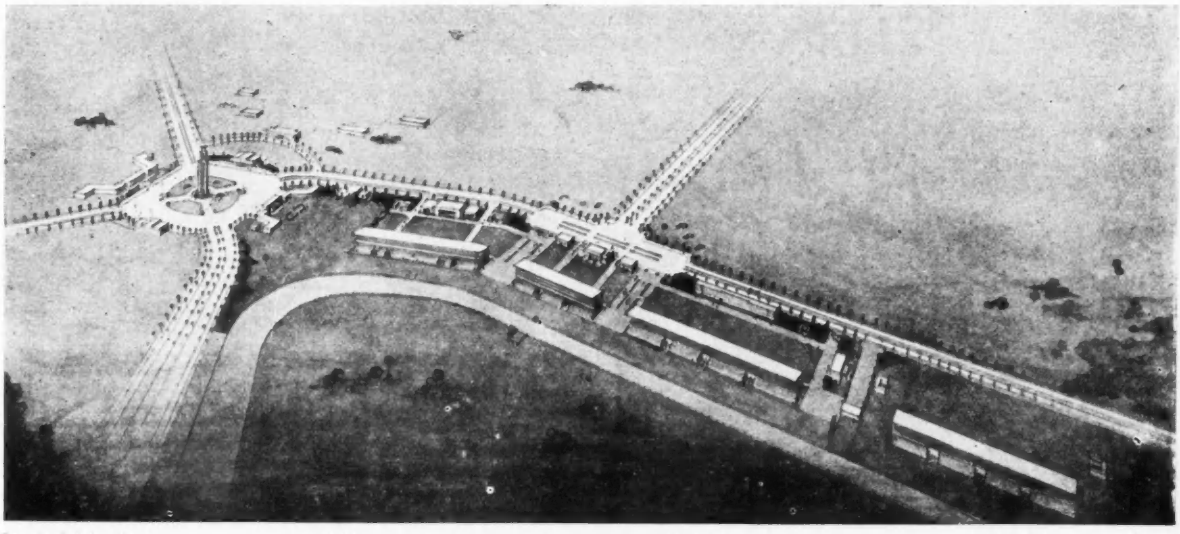
While at Liverpool this influence has been a source of lasting inspiration, the Architectural Association Schools turned earlier away from established faith, and approached the problem of architectural training from another standpoint, attempting rather to train the mind to understand and to apply understanding. The system is in a sense more complicated and implies a certain type of intelligence not always to be found; but in so far as it goes to the roots of the matter and proves to students the true relationship of past to present, and of form, colour, light and shade one to another, it performs its chief function.

The graduated stages by which the student is led to appreciate the meaning, say, of form and colour, and to weave these into what he designs, are part of an ingenious system that never teaches anything that cannot be proved and experienced by the student in his work in the studio. He learns the meaning of Gothic vaulting by drawing sheets of isometric constructional drawings. He studies Greek and Roman architecture by sketching in the British Museum, so that he can embody the results of his work in a studio design, in which colour may perhaps form a part. Again, before he makes detailed working drawings he must make constructional



Liverpool School.] [*By B. St. C. Lightfoot : Year v.*

Design for a garage : perspective sketch.



Liverpool School.] *Bird's-eye view of layout for racecourse buildings at Doncaster.* [*By W. G. Plant : Year v.*



A design for a small dairy farm : perspective drawing illustrating the north elevation.



Liverpool School.] [*By A. E. Ferriby : Year iii.*

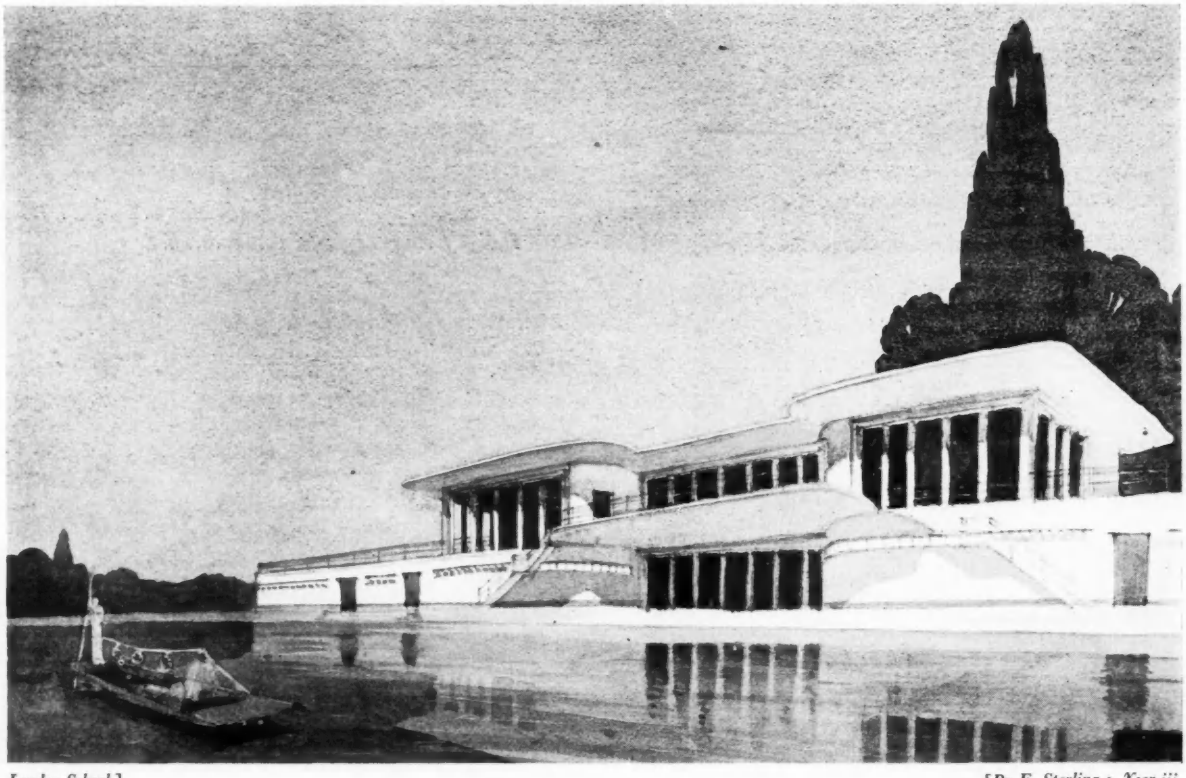
South elevations of buildings designed for a small dairy farm.

drawings to several scales, and in every branch this three-dimensional understanding is insisted upon, and no chance is lost of studying the problem in isometric or perspective.

It is this open-eyed approach to every problem that strikes the visitor as being a particularly valuable part of the training. It gets a student nearer to the truth of what he is doing and, with only a little less sincerity than a model, demonstrates the solid nature of the buildings drawn only with lines on paper.

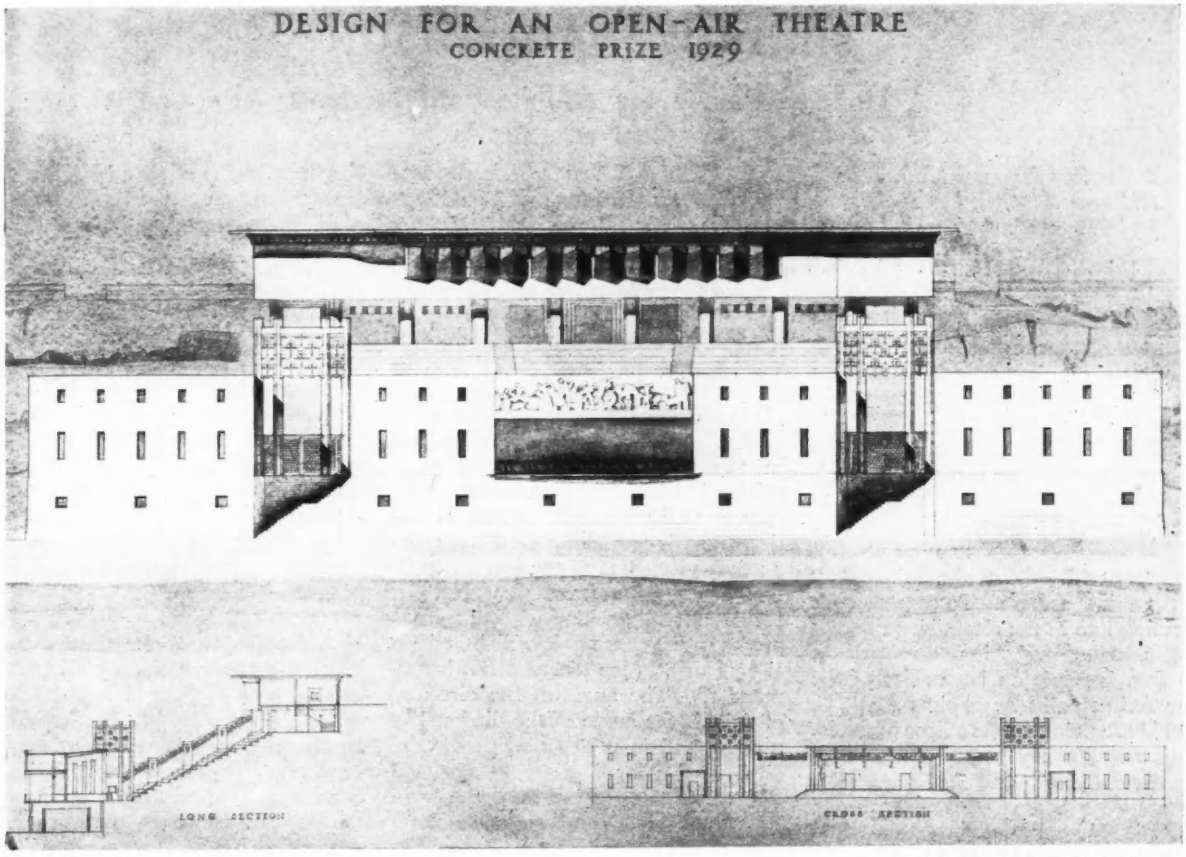
It must be difficult to devise a system of training that constantly connects pure design with the materials of building. An architect is more than a builder of buildings, but he is never removed from the facts of building or the touch and handling of bricks and mortar. Hence it is vital that design should always be tempered by the necessity of translating it into working drawings. And that the working drawings are the outcome of earlier "constructional" drawings, and are the student's real expression of the way he would build the building he has designed on paper is perhaps the most valuable point of all—the bridge between design and fact.

I have not attempted to discuss in detail the drawings illustrated here. Without some knowledge of the programme of each design my comment



London School.] [*By E. Starling : Year iii.*

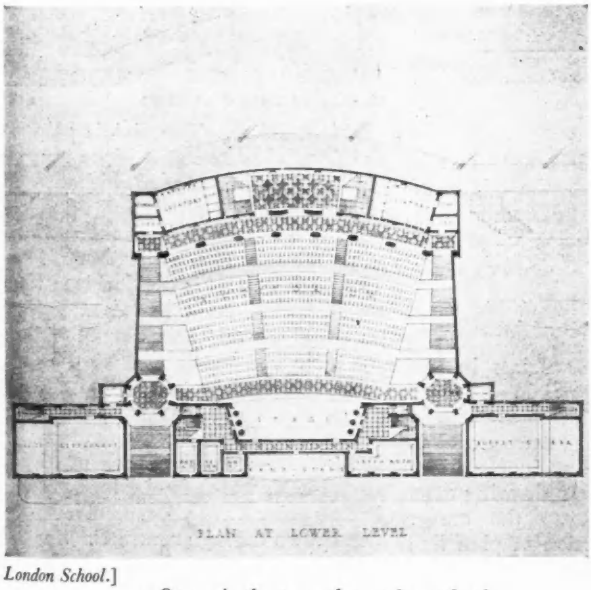
A riverside bathing establishment : perspective drawing.



London School.] [*By Miss P. B. Webster : Year v.*

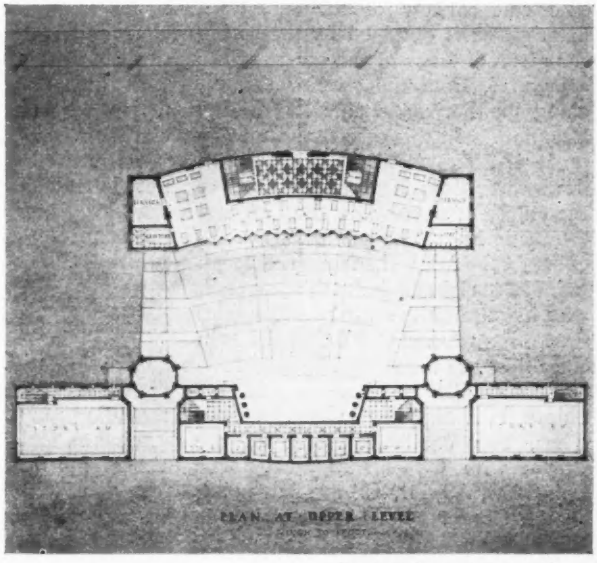
Design for an open-air theatre : elevational drawing, with sections on smaller scale.

would be of still less value than it might otherwise be. Neither have I seen the exhibition of drawings from which the three examples of Liverpool School work are drawn. The level of achievement in the two exhibitions I have seen was high, and no one who sees the several years' work at the A.A. can help but be absorbed by the intermediate stages of growth no less than by the more finished products of advanced years. It makes one sigh to be at school again and not a little frightened of the eternal precocity of youth.



London School.]

Open-air theatre : plan at lower level.



[*By Miss P. B. Webster : Year v.*

Open-air theatre : plan at upper level.

SHADOW PROJECTION

A Holiday Course for Architectural Students: vi

BY JOHN M. HOLMES

In previous diagrams (Nos. 1-4 : June 26) "slicing" was explained. With Nos. 2, 3, and 4 of these should be compared the present examples, which complete the demonstration of various alternative and more rapid methods of projecting shadows on typical forms, without use of plan, some of which were discussed in Nos. 5-9, published last week.

Diagrams 10-13: Shade and Shadow of a Sphere; Dividing Lines (without slicing)

SHADE OF A SPHERE, WITHOUT SLICING

DIAGRAM 10. Experience of projecting the dividing lines of spheres by the slicing method demonstrated in diagram 2 will show that the elliptical dividing line on any sphere in elevation and in plan has for its major axis in each case a line at right angles to the direction of light, and that each ellipse circumscribes two equilateral triangles which have the minor axis of the ellipse as base. To construct the dividing line in the elevation (diagram 10), without projection, an angle of 30 deg. is made on both sides of the line AC at point A. Points A, B, C, and D are points in the ellipse of shade. Four more points in the ellipse may be determined where the sides of a square, with AC as one of its diagonals, cut the vertical and horizontal lines drawn through the centre of the circle, viz., points F, E, G, H. The elliptical dividing line in plan is produced in a similar way on the major axis FE.

SHADOW OF A SPHERE, WITHOUT SLICING

The shadow of a sphere may be drawn geometrically in a similar fashion. The cast shadow of the sphere in diagram 10 is obtained by measuring the given distance of the centre of the sphere, Z, from the shadow surface, along the horizontal line ZO in the elevation. In this case the given distance is ZN. A vertical line drawn downwards from N gives the centre of the ellipse of shadow on the diagonal Z—BS at M. The minor axis of the ellipse, CS—AS, is then drawn through point M at right angles to this diagonal, with its extremities resting on diagonals drawn from A and C. Other points in the ellipse are then found by constructing lines similar to those used for the elliptical dividing line in the elevation. Thus, two equilateral triangles are drawn with CS—AS as base. The points DS, AS, BS, CS are four points in the ellipse. Four other points in the ellipse may be determined where the sides of a square with DS—BS, as one of its diagonals, cut the vertical and horizontal lines drawn through the centre M; viz. R, S, T, U. The eight points are then joined to form the ellipse of shadow.

DIAGRAM 11. A further interesting method of determining four points in the elliptical dividing line of a sphere is shown in diagram 11. An elevation of the ellipse required is first drawn as it would be seen from the 45 deg. viewpoint of the sphere, as in No. 2 (see also small plan No. 3). [It is a straight line PCL at right angles to the true angle of light, which is 35·2 deg. (See diagram B2, instalment 1.) The angle of the direction of light is the angle of the diagonal of a cube, and may be found geometrically, as in small diagram No. 4.] Point L is then projected vertically to M, and point M is projected horizontally to M^1 on the 45 deg. diagonal in the front elevation. The distance $C^1 N^1$ is made equal to the distance $C^1 M^1$. Four points in the ellipse, L^1, M^1, P^1, N^1, are thus obtained, and four further points may be determined by constructing a square on diagonal L^1P^1, as in diagram 10.

For practical purposes all constructional lines are made on the same elevation. The ellipses of any number of slices at this angle may be obtained when necessary by drawing further major axes parallel to LP in the 45 deg. elevation.

The method shown in diagram 11 is not intended to take the place of that in diagram 10, but it affords a good test of appreciation of general principles.

DIVIDING LINE IN THE ELEVATION OF A TORUS MOULDING, WITHOUT SLICING

DIAGRAM 12. Five points in the elevation dividing line in a torus moulding may be deduced as follows:

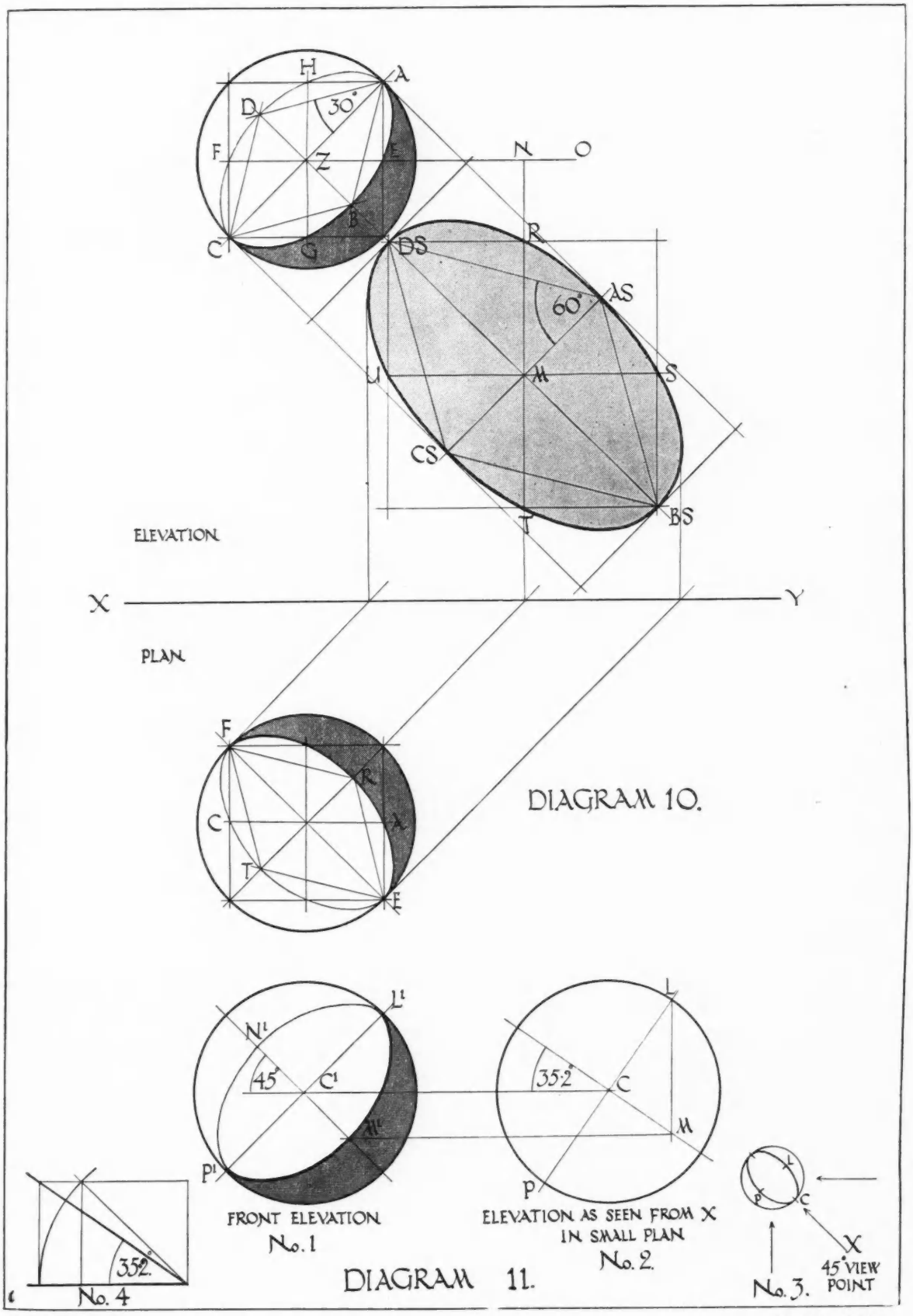
Points A and B are the two extremities of the dividing line in elevation. They are obtained by drawing rays at 45 deg. tangent to the curve. Reference to the portion of plan line CD will show that a ray at 45 deg. in plan will be tangent to the form at E in plan, and that therefore EE in elevation is a point in the dividing line. As points A and F are symmetrically placed on either side of the axis of the form at 45 deg., the rays of light will be tangent to the form at F at the same height from the *XY* line as at A (see small plan). A line drawn horizontally from A will give point F, a further point in the dividing line. We now have four points in the dividing line, but an additional point is required between A and F before an adequately accurate line may be drawn.

The true angle of the ray ZZ with the ground (small plan) is approximately 35 deg. (See diagram B2, instalment i.) By drawing a ray at 35 deg. tangent to a true elevation of the moulding it is possible to ascertain the height from the *XY* line at which the ray will be tangent to the 45 deg. contour. The left contour of the torus is used as an elevation for this purpose, and the ray $Z^2 Z^2$ is drawn at 35 deg., tangent to it at N. The intersection of a horizontal line drawn through N with a line at 45 deg. drawn upwards from O fixes the fifth point in the shade line, P. The points are then joined to form the shade line. See also diagram 4 for the more usual method.

DIVIDING LINE IN A QUADRISPHERICAL NICHE, WITHOUT SLICING

DIAGRAM 13. The dividing line in the front elevation of a niche may be *approximately* determined without slicing or plan by constructing an ellipse on a 45 deg. axis through the centre C at right angles to the direction of light. The distance DC is divided into three equal parts, and a fourth equivalent part marked on the diagonal beyond the centre C at F. FG is then the minor axis of the ellipse. LM is the major axis. The portion of the ellipse which plays its part in the shadow edge is MF. The curve is then continued to point Y, which is obtained by projecting point Z at 45 deg. on to a vertical line drawn through centre C. See also diagram 3 for the more usual method.

(To be continued)



Shadow Projection.] [*By John M. Holmes.*

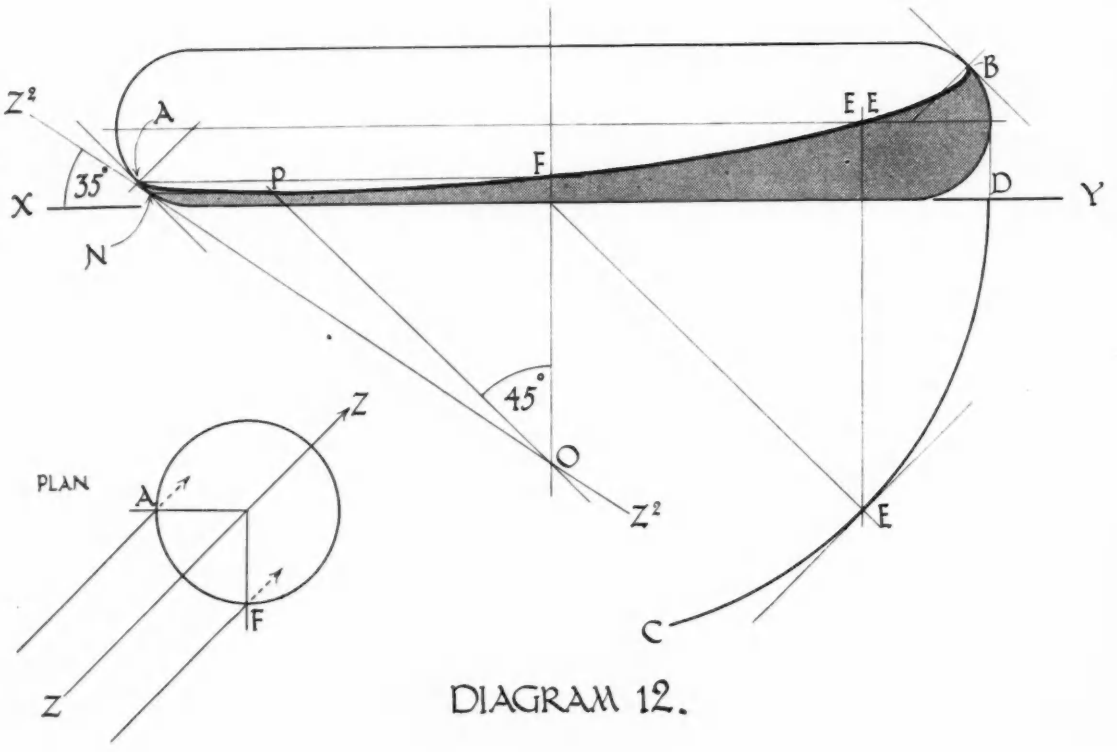


DIAGRAM 12.

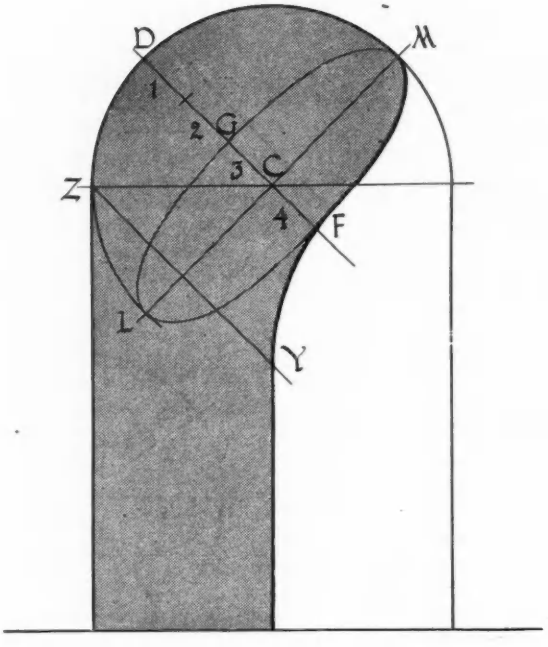


DIAGRAM 13.

Shadow Projection.] [*By John M. Holmes.*

AN ISOMETRIC DRAWING OF ST. PAUL'S

For the first time an isometric view of St. Paul's Cathedral has been made, and it is, indeed, a mighty work. From the top of the cross right down to the London clay every part is drawn out with infinite pains; the whole is a fine work of art. Looking at the drawing one is struck with the multitude of portions which have been thought out in detail to make this wonderful mass of accurate information. It may be said at once that Mr. Mervyn E. Macartney, F.S.A., Surveyor to the Fabric, has achieved an important production that tells a story as nothing else could.

The actual drawing is by Mr. R. B. Brook-Greaves in collaboration with Mr. W. Godfrey Allen; other assistance has been rendered by Mr. Matthew Dawson, F.R.I.B.A., and Mr. E. J. Bolwell, but the drawing is composed and placed on the paper so that the treatment of the whole is uniform. The isometric view is inscribed to Mr. William Dunn, F.R.I.B.A., who first suggested showing the construction of St. Paul's Cathedral by this means. The drawing shows the church as Sir Christopher Wren planned it, with all his subterfuges to make a little go a long way; we see how small are his main piers for the support of the crushing weight piled above them in drums and dome.

Right in the centre of the picture we see the anxiety of the master as he piled columns together in the hope of meeting the enormous strain, and whether we love or condemn Wren we must acknowledge that he could not have achieved this masterpiece had he been less daring.

On the left side, where is a spiral stair, we see with a little wielding of the dividers how phenomenally it overhangs the base in spite of Wren's wise effort to set back the load behind the whispering gallery. In the foreground of the drawing can be seen the base of the great pillar cut athwart and showing its thin casing of stone and its vast quantity of rubble; the rubble is, of course, both small and large in actuality, but the drawing shows a fair type of Wren's economical method of work.

The construction of the dome, cone, and white stone gallery, bound in as they are with chains, compares favourably with that of the lower portions of the building, which have no chainage, though the pleasant little inverted relieving arch in the lowest cell behind the whispering gallery tells how Wren gave thought to this dangerous part of the structure also.

It must be remembered that although the drawing shows the building perfect, actually it forced itself out of the perpendicular at some early time. The drawing would hardly be improved if its principal lines were made to wave, and thus show the distortions; or if the principal bars of reinforcement were shown in position. It is to be hoped, however, that we shall in the future see published an isometric drawing showing these distortions and the method of repair.

WILLIAM HARVEY

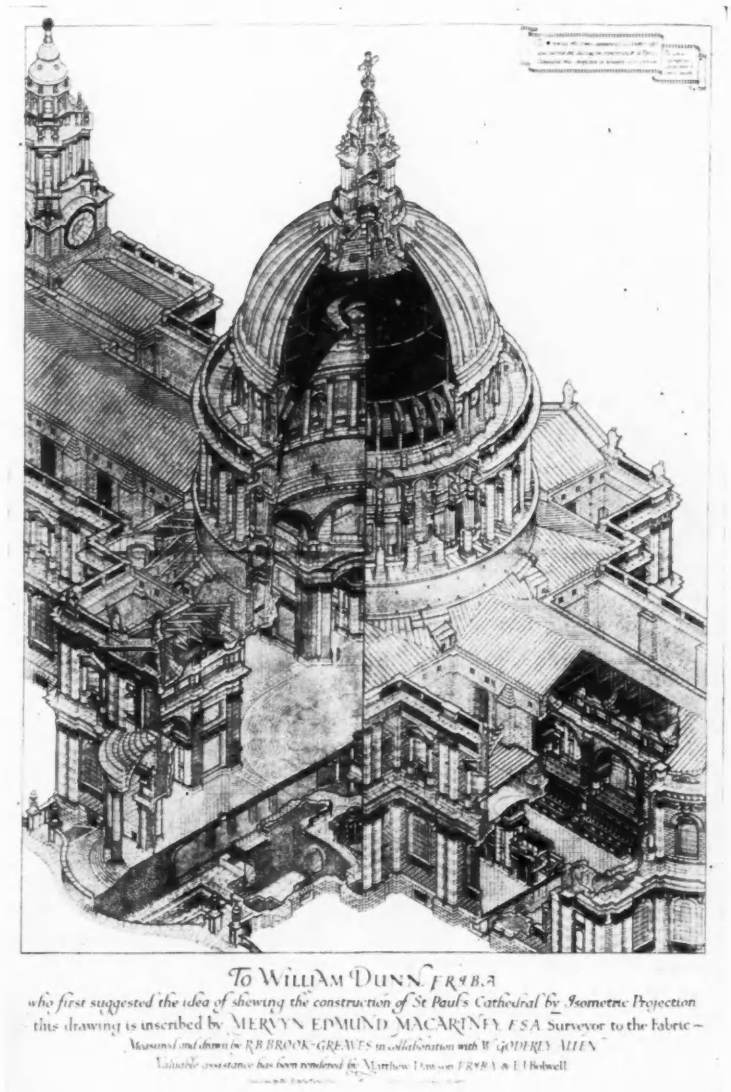
An Isometric Drawing of St. Paul's Cathedral. By R. B. Brook-Greaves and W. Godfrey Allen. The Architectural Press. Ordinary edition, 30s. per copy; edition de luxe, £3 3s. per copy.

LITERATURE

STRUCTURAL ENGINEERS' YEAR-BOOK

The year-book and list of members for 1929 has just been issued by the Institution of Structural Engineers. It has been corrected to April 10 last and contains the complete list of members up to March 31, a total of 3,395. The contents include lists of members of the council, and the standing and sectional committees; lists of branches and committees; method of application for membership and syllabus of examinations; the reports and publications of the Institution; and particulars of the scholarships.

Institution of Structural Engineers' Year-Book. Price 5s. to non-members.



A miniature and necessarily rough reproduction of The Isometric Drawing of St. Paul's Cathedral. *It is approximately $\frac{1}{500}$ size of the original drawing and $\frac{1}{54}$ size of the reproduction offered for sale.*



Hadleigh Guildhall. [*From* Minor Architecture of Suffolk.]

THE MINOR ARCHITECTURE OF SUFFOLK

The intention of this work exceeds the fulfilment. Both the general idea of the series and the particular subject of its first essay excite the most pleasurable anticipations. No doubt after this trial trip improvements may be made in the succeeding issues, and it is in the spirit of constructive criticism that these remarks are made.

The style of the book is good, and the collotype plates most pleasant to see where the photographs are worthy of the medium; but, frankly, most of them are not. They bear the impress of the snapshotter—uncertain of his verticals, of his focus, and of the exact field covered by his lens; many are taken from uncomfortable viewpoints, and others would be improved by trimming. In a county whose villages and small towns yet remain full of charming survivals from a simpler age, it would be possible to fill twenty such books with an equally rich selection and still leave a surplus; but, speaking generally, the examples are well chosen—it is the presentation which causes disappointment. The complete absence of useful detail photographs is also noteworthy, and no craft is in greater need of instant photographic record than that of the Suffolk pargetter (whose craft is miscalled "parquetry" in the somewhat exiguous text). Each district exhibits some slight variation of pattern which was locally used—guilloche, fan, basket-weave, chevron, "square-pricking," and so forth; they are perishing at a rapid rate, and large-scale photographic records would be valuable while they remain possible. The craze for exhibiting hidden timbering condemns dozens of examples yearly.

Of the buildings illustrated, the remote and sleepy town of Hadleigh furnishes some of the best, while the even more remote Bildeston and the now inevitable Lavenham give others. Kersey is justly extolled, but not done justice to by the pictures, while two of the examples shown are, at least in part, "fake." In the general note on the series the publisher says that "mere picturesque views will not be presented," and hopes that the series will "prove a valuable addition to the library of both the architect and the architectural collector." It may well do so, for it is a relatively unhackneyed field; but it must be made to exhibit its material in such fashion that architects can discern in it the things which interest them.

E. G.

Domestic Architecture of Old England Series. Series I: Minor Architecture of Suffolk. Forty-eight plates and seven pages text. By Dexter Morand. London: John Tiranti & Co. Price 17s. 6d. net.

ARBITRATION PROCEDURE

If there is one section of the community to which this handbook should appeal especially, it is to architects and surveyors and others having anything to do with building contracts, wherein they are frequently specified as the persons to arbitrate upon any disputes which may arise.

When the Institute of Arbitrators, in pursuance of its educational work, decided to publish a handbook on the subject, the council invited Capt. W. T. Creswell, barrister-at-law, to write it, well knowing that there was no one better fitted for the task of producing a work of use alike to the expert and the least experienced in arbitration matters, whether he be a lawyer or a layman.

The ideal arbitrator, like the poet, is born and not made; and it is not everyone who possesses the judicial temperament and mind so essential in anyone who may be called upon to exercise the functions of a Solomon; but all may acquire a knowledge of the procedure and rules of evidence, etc., without which he could not properly undertake to conduct an arbitration. Even the expert sometimes needs a reminder or guide on some question which may arise, and there is probably no point at issue which could not be settled by a reference to this handbook.

It sets out in a concise and readable form what "arbitration" means, and how to make a "submission" and an "award." The author shows the difference between an arbitration and a valuation, defines the duties, qualifications, and responsibilities of an



Ufford. [*From* Minor Architecture of Suffolk.]

arbitrator, the procedure to be followed prior to, during, and after, the hearing and the award, and makes clear what evidence the arbitrator must hear and that which is merely admissible, how he is to frame his award and state a special case if required. There is also a reference to costs and fees and a useful table of cases, an appendix of forms and a detailed index for quick reference.

The foreword by that eminent authority, Sir William Mackenzie, K.C., C.B.E., indicates that a study of the book will enable all concerned to avoid the many pitfalls into which even the most experienced arbitrator may be led if he fails to follow the rules laid down by the Court for his guidance.

We cordially recommend the book to all concerned, and particularly to those interested directly or indirectly in the building industry.

C. MCARTHUR BUTLER

Handbook of Procedure and Evidence in Arbitrations. By W. T. Creswell, Barrister-at-law. The Institute of Arbitrators, Incorporated, London. Price 6s. net.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

Parliament was opened, in the absence of the King, by Royal Commission on Tuesday, July 2. The King's speech, which was read by the Lord Chancellor, contained the following reference to housing: "My Ministers propose to introduce legislation to promote an extensive policy of slum clearance, and to make further provision for housing in urban and rural areas."

Charing Cross and Waterloo Bridges

During the debate on the Address, Mr. J. H. Thomas, the Lord Privy Seal, outlining the Government's plans to relieve unemployment, said that several years ago, after a great agitation, the House of Commons sanctioned a scheme, and money was allocated or ear-marked, for dealing with Charing Cross Bridge. It involved an expenditure of roughly £11,000,000. Although there would be engineering delays and delays in connection with surveys, the importance of the subject from the immediate and practical point of view was that the reconstruction of Waterloo Bridge, which could be got on with at once, was dependent on an agreement in regard to Charing Cross. Therefore, what he was concerned with was not alone the ultimate chance of getting to work on Charing Cross Bridge, but getting on immediately with Waterloo Bridge, on which work could be started immediately. The Minister of Transport had met the representatives of the interests concerned, and he desired to bear tribute to the L.C.C. and to the representatives of the Southern Railway Company, who had both responded magnificently. Not only had satisfactory progress been made, but that progress enabled him to say that Waterloo Bridge ought to be got on with absolutely at once.

Housing Progress and Loans

At question time, in reply to Mr. Wellock, who asked as to the number of houses under construction and the number authorized but not started, under the Housing Acts of 1923 and 1924 respectively, on May 1, June 1, and July 1, Mr. Greenwood gave the following figures:

	May 1, 1929	June 1, 1929
Number of houses under construction:		
1923 Act	31,261	33,941
1924 Act	31,149	34,549
Number of houses authorized but not started:		
1923 Act	55,220	50,631
1924 Act	30,238	27,365

The figures for July 1, 1929, were not yet available.

Mr. Muggeridge asked what limitations, if any, were placed upon the advances to local authorities from the Public Works Loans Commissioners for the erection of houses to let under the Housing Acts and also for the purpose of making advances to prospective purchasers of houses under the Small Dwellings Acquisition Acts and the Housing Act, 1925.

Mr. Pethick-Lawrence, the Financial Secretary to the Treasury, said that there were no limitations except those necessary to secure that Government loans go to those authorities least able to borrow for themselves. Loans might be made by the Public Works Loan Commissioners under the Housing Acts to any local authority having a rateable value not exceeding £200,000 in England and Wales, and £250,000 in Scotland. Loans might be made to authorities, other than county councils, with a rateable value over these limits up to the equivalent of half the gross sales of savings certificates in the area during the preceding twelve months. County councils might borrow a year in arrear for housing purposes up to the amount available in their area under the arrangement he had described relating to savings certificates, less the amount of the loans made to other authorities in the area. There were no limitations on loans under the Small Dwellings Acquisition Acts.

ARCHITECTURAL EXHIBITS AT THE ROYAL ACADEMY

It has been decided that for the Royal Academy Summer Exhibition of 1930, the architectural exhibits of members will be limited to geometrical drawings not exceeding ½ in. scale; and that preference will be given to such drawings submitted by non-members.

LAW REPORTS

ALLEGED UNREASONABLE CONDITION: PURCHASE OF FITTINGS AND FIXTURES

Poole v. *Nino Fano. King's Bench Division. Before Mr. Justice Macnaghten*

The point in this action was whether it was an essential condition of the sale of certain premises at Arkwright Road, Hampstead, that the fittings and fixtures had to go with the house which was for sale.

Plaintiff, Mr. A. H. Poole, trading as Britton Poole & Co., of Wellington Road, St. John's Wood, sued Mr. Nino Fano, of 6 Arkwright Road, to recover the sum of £120 for services rendered in finding a purchaser for defendant's house at £4,500.

Plaintiff's case was that he found a willing purchaser, but that the sale went off because defendant imposed a condition, which plaintiff said was unreasonable, that the purchaser should take certain curtains, carpets, and electroliers for £290.

Plaintiff denied that he received the condition from the defendant before there had been an offer and acceptance.

For the defence it was alleged that the purchaser was willing to buy the curtains and that the defendant did not insist on his taking the carpets, but that the plaintiff was told from start to finish that the tenant's fittings went with the house.

His lordship, in giving judgment for the plaintiff for £120, and costs, said he was not satisfied that there was a stipulation that the fittings and fixtures were to be taken at a valuation.

A DISPUTED BOUNDARY: DITCH AND HEDGE

Parker v. *Fifield. Court of Appeal. Before Lords Justices Scrutton, Greer, and Russell*

This appeal raised an issue as to the ownership of a hedge and ditch between the land of adjoining owners, Mr. Parker saying that the whole of the hedge and ditch belonged to him, while Mr. Fifield contended that the whole of the ditch was his and half of the hedge. The dispute arose over the drainage, the plaintiff wishing to drain his domestic sewage into the ditch.

The appeal was by the defendant from a judgment of the King's Bench Divisional Court affirming a judgment of the county court judge at Guildford in favour of the plaintiff.

Mr. C. A. Bennett said the land in question was at East Horsley, Surrey, the appellant and defendant being adjoining land-owners. Their land was separated by a hedge. On the

defendant's side was an irregular-shaped ditch, leading to a pond on defendant's land. The ditch supplied the pond with water. There was no evidence before the Court that at the time the ditch was made there were two separate ownerships. The plaintiff was desirous of draining his domestic sewage into the ditch and it would find its way to the pond. In view of that the defendant wished to assert his rights over the ditch. Counsel alleged that there was a custom in Surrey that the person who owned the ditch also owned the hedge, but he understood that that only applied when there were no deeds defining the boundary. The Divisional Court had affirmed the decision of the county court judge that the hedge in question was an ancient hedge and belonged to the plaintiff to whom the ditch was assigned, as it was one boundary. Counsel said the question was whether the boundary was as the plaintiff contended for or whether it was as the defendant said, along the centre of the hedge itself. Counsel submitted that in the evidence before the Court below the boundary was as the defendant contended for.

Mr. Farwell, K.C., for the respondent, contended that the evidence supported his client's case and the subsequent finding of the county court judge.

The Court allowed the appeal and held that in the documentary evidence the boundary line was the centre of the hedge. On the proper construction of the conveyances there was evidence of the intention of the conveyance of half the hedge to the plaintiff.

OXFORD STREET LEASES

City Tailors, Ltd., and B. Gilbert v. *Barder and Rogers. Court of Appeal. Before Lords Justices Scrutton, Greer and Russell*

These appeals, which were cross appeals by both plaintiffs and defendants from a judgment of Mr. Justice Mackinnon, sitting in the King's Bench Division, had reference to the sale of leases of premises at 1 Oxford Street.

Mr. Du Parcq, K.C., for the defendant, Mrs. Susan Barder, said an important point was raised. The case itself was interesting as showing the large increase in the value of business premises in one of London's main shopping centres. The City Tailors, Ltd., were the holders of the residue of a lease for eighty years from 1888 at £150 a year. This was subject to an underlease for twenty-one years from 1906 at £400 a year. In 1914 the defendant Rogers, a dentist, became tenant for three years of two rooms on the second floor from the husband of the defendant, Barder, and at the end of the period he remained on as a quarterly tenant. On June 24, 1927, Mrs. Barder, who had become trustee under the will of her husband, handed over to City Tailors, Ltd., all the keys except those of Rogers' premises and said that she had given Rogers notice to quit but that he refused to give up possession. By an underlease of May 12, 1927, City Tailors demised the premises to the other plaintiff, Mr. Gilbert, for thirty years from June 24, 1927, at a premium of £2,000 and a rental of £2,000. The defendant Rogers pleaded that the plaintiff Gilbert agreed to allow him to remain on in possession as a tenant from year to year at £222 a year. This, however, was denied. The learned judge, after hearing the case, had entered judgment against the defendant Rogers for immediate possession and £700 damages, and against the defendant Mrs. Barder for nominal damages of £15, with an order for possession. Mrs. Barder now appealed and there was a cross appeal by the plaintiffs. Counsel pointed out that the learned judge had directed his remarks against Rogers, saying he had stayed in the premises for two years, with the result that Gilbert, in addition to losing rent, had been unable to carry out contemplated rebuilding of the shopfront and reorganization of the premises. Counsel contended that under the circumstances the judge was wrong in giving any damages against his client and consequent costs.

Mr. Singleton, K.C., for the plaintiffs, supported the judge's finding.

The Court dismissed both appeals, holding that they saw no reason to interfere with the judgment.

Lord Justice Scrutton said Mrs. Barder had not, in the circumstances which had happened, given up possession of the premises owing to Rogers having remained in possession on the first floor. In his view it was right that judgment should be given against her for possession because she had not given up possession of the premises, and he saw no reason to interfere with the damages awarded against her of £15. With regard to the appeal of the plaintiffs, who alleged that as the judge had assessed the damages against Rogers at £700, the damages ought to be assessed at the same figure against Mrs. Barder, his lordship thought that as the plaintiffs had not taken the ordinary steps of keeping Rogers out of the premises, they had not taken proper steps to minimize the damages by shutting the door against Rogers. Their appeal therefore failed.

WHITE LEAD PAINT

London Chamber of Commerce v. *Burgum Hart and Co. Before the Borough Magistrates of Bolton*

On June 18, the borough magistrates of Bolton, Lancs., convicted Messrs. Burgum Hart & Co., of Deane, Bolton, in a prosecution under the Merchandise Marks Act, for having applied a false trade description to paint, and sentenced them to a fine of £10 and £40 costs. The prosecution was instituted by the London Chamber of Commerce, and was conducted by Mr. C. W. Measor, Counsel, instructed by Messrs. White and Leonard.

Mr. J. F. Butterworth, painter and decorator, of Oldham, Lancs., past-president of the Master Painters' Federation, said that on March 15 he ordered from the defendants as samples two 14 lb. tins of genuine ready-mixed white lead paint, and that he received two tins invoiced and labelled genuine white lead paint.

Evidence was given that upon analysis the paint contained in the tins was found to consist as to over 30 per cent. of barytes and other foreign matter, or, estimated on a pigment basis (i.e. excluding oil and turpentine), of over 50 per cent. of barytes and other foreign matter, the prices of barytes and dry white lead being respectively about £5 and £38 per ton.

Dr. H. Morgan, past-president of the Oil and Colour Chemists' Association, produced a standard specification for genuine white lead ready-mixed paint prepared by a committee of the British Engineering Standards Association (of which he was chairman), showing that such paint must contain not less than 76 per cent. and not more than 80 per cent. of genuine dry white lead, with 4 per cent. turpentine, or white spirit, and the necessary driers (with not more than 4 per cent. extender, if permitted by the purchaser), the remainder being linseed oil. This was settled by the committee, including representatives of Government departments, R.I.B.A., federations of paint manufacturers, master painters and master builders, and other large users of paint, as being in accord with the practice and custom of the trade.

The defendants said that they had for some fourteen months, without previous complaint, been making up lead paint on their formula, which included 25 per cent. driers, and were unaware of any standard for white lead paint.

Many of our readers have written to ask where the report of the Conference on Specifications, referred to by Astragal under the heading "Specification: New Style," in our issue for June 12, may be obtained. The report, together with the outline specimen, will be found in the *R.I.B.A. Journal* for June 15.

CORRESPONDENCE

ART AND THE MOTOR-CAR

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Mr. Hobhouse must have his little jokes, and I frankly admit that I prefer hand-made cakes, but this is not from æsthetic reasons, the proof of the pudding being in the eating.

It is satisfactory to find that Mr. Hobhouse has shifted his ground and that now we are not asked to regard motor-cars as works of art, or to place "Mona Lisa" in the same category with *tin* Lizzies.

T. LAWRENCE DALE

THE WORKSHOP OF ROBERT ARMSTRONG

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—With some difficulty and the kindly assistance of the Town Clerk and the Chief Librarian of Lambeth the workshop of Robert Armstrong, illustrated in your issue for June 26, page 983, has been definitely established to have occupied the site of Nos. 46-48 Hercules Road, Lambeth, prior to about 1911.

The house was built c. 1816 and the workshop about three years after; the original occupier of the house being a Mr. John Armstrong. The borough rate books show that in 1824 Mr. Robert Armstrong was in occupation of the house and the workshop, which were then known as No. 24 Penlington Place. In 1853 Robert Armstrong was still in occupation, and, meanwhile, the name had been changed to 24 Hercules Buildings.

Robert Armstrong is described as a plasterer, and in 1860 we find John Mariano Casentini, modeller, in occupation. After this the buildings became tenements and remained so until their demolition. About 1890 the address was altered, for the last time, to 46-48 Hercules Road.

It may be surmised that Robert Armstrong was a modeller of garden statuary and ornaments, profiting, perhaps, by the stimulus given to the trade by Coade and his compeers. Perhaps, however, one of your readers could throw some light on his activities.

W. W. BEGLEY

TRADE NOTES

The Birmingham Guild Ltd. have removed to new offices and showrooms at 22 Bruton Street, Berkeley Square, W.1. Telephone Nos.: Mayfair 2731-2.



Lalique is here seen in various moods. The Firebird screen assumes an almost ethereal beauty when illuminated from the bronze base. The scent bottles show how he can invest even small objects with grace and distinction.

The Stanton Ironworks Co., Ltd., near Nottingham, have obtained two important contracts for cast-iron pipes for delivery to South America. One is for forty miles of pipe for the Monte Video water supply, and the other for ten miles for the Rosario water supply. The pipes in both cases are chiefly in large diameters.

Mr. S. H. Lloyd, A.M.INST.C.E., P.A.S.I., has been appointed to the staff of the Red Triangle Portland Cement Organization. Mr. Lloyd was engaged on the Hampstead Garden Suburb and the Gidea Park estate, Romford. Later, he acted as resident engineer for several constructional works in the Colonies, among them the extension of Freetown Water Works in Sierra Leone.

Joining the Ministry of Transport (Roads Department) in 1920, Mr. Lloyd had charge of the following arterial road constructions: East Ham and Barking bypass, part of the London-Tilbury road, and the Bexley Heath bypass from Woolwich to Dartford.

Among the exhibits by Messrs. Ruston and Hornsby, Ltd., at the Royal Agricultural Society of England Show at Harrogate were two of the firm's airless injection cold-starting oil engines; one a three-cylinder 112 b.h.p. vertical type and the other a 22 b.h.p. horizontal type. These engines run on the cheapest fuel oils, either crude, residual, or tar oils, and the fuel consumption does not exceed ·48 lb. in the smaller sizes, and is as low as ·4 lb. per b.h.p. in the larger vertical sizes. In this class were the firm's horizontal oil engine class "M," 10 b.h.p., also using heavy and refuse oil and fitted with petrol starter. This engine represents the latest development in medium compression oil engines between 6½ and 40 b.h.p.

An exhibition of decorative lighting, modern glass, and jewellery, by René Lalique, is being held at Breves' Lalique Galleries, Knightsbridge, S.W. The principal feature is an exact reproduction of the modern interior which Lalique designed for the last Paris Salon Exhibition. In this room glass is used as the principal medium, with lighting as a decorative accessory.

The centre pendant and wall lights were specially designed by Lalique as a complimentary mark of his association with Breves' Lalique Galleries. The vases standing on plinths are embellished with figures of athletes in low relief. The cocktail cabinet is fitted with interior glass panels and contains a representative selection of wine glasses, liqueur glasses, and decanters.

The background of the room is divided by columns of rare wood, and the subdued colour of the hangings and pile carpet are in perfect harmony with the note set by the illumination. Among the other exhibits are some interesting specimens of Lalique glass and jewellery. These serve to indicate the variety of the artist's work, and its distinction.

At the annual general meeting of the Ship Canal Portland Cement Manufacturers, Ltd., held at Cannon Street Hotel, E.C.4, Mr. Oliver J. S. Piper, the chairman, referring to the profit and loss account, said the net profit for the year ending March 31, 1929, was £137,741, as compared with £138,708. Taking into consideration the extremely competitive conditions and the unnecessary price-debasement which prevailed in the cement industry for the greater part of the year, together with the depression which still continues in the principal industries in Lancashire, and those other areas directly served by the company, he considered that the results achieved, as shown by the accounts, are extremely satisfactory. To this net profit of £137,741 8s. 10d., £38,662 6s. 6d. brought forward from last year has been added, so there is an amount of £176,403 15s. 4d. available for disposal. The firm have already paid the dividend on the preference shares amounting to £11,250, and placed to the debenture redemption account £12,000. The directors recommended the payment of a dividend of 8 per cent., less tax, on the issued ordinary shares, absorbing £80,000, which, together with the £40,000 for depreciation leaves £33,153 to carry forward to next account. The firm are completing arrangements to hold under one central control the entire assets of Greaves, Bull and Lakin (Harbury Works), Ltd.; Holborough Cement Co., Ltd.; Dunstable Portland Cement Co., Ltd.; and Smeed, Dean & Co., Ltd.

COMPETITION CALENDAR

July 13. Proposed New Council School for 300 children, to be erected at Dudley Wood, for the Dudley Local Education Authority. Open to architects having an office within a radius of fifteen miles of Dudley. Assessor: Mr. Herbert T. Buckland, F.R.I.B.A. Premiums: £100, £50, and £25. Applications for conditions, etc., should be made to Mr. J. Whaley, B.SC., Director of Education, Education Offices, St. James's Road, Dudley.

July 15. The Travel Association of Great Britain and Ireland invite designs for an appropriate device for use on all their publicity literature. The competition is open to any British subject. Designs should be submitted both in black and white and in not more than three colours. They will be judged by a committee of three, presided over by Sir William Orpen, R.A. Premiums: £50, £20, and £15. All designs, complete with pseudonym, should be sent in to the Secretary, Travel Association of Great Britain, 35 Old Queen Street, S.W.1, by July 15.

July 20. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should be made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea. Deposit £2 2s.

No date. International Competition, promoted by Thonet Bros. Ltd., for the creation of new designs in furniture to be executed either wholly or partially in bentwood technique. Prizes to the total amount of 2,000 dollars will be distributed for the four competition groups as follows: For each of the four groups one first prize of $225; for each of the four groups one second prize of $125; for each of the four groups two third prizes of $75. It is reserved to the jury to allocate the total amount destined to each group in four prizes of different amounts. Furthermore, Thonet Bros. are at liberty to purchase any designs not awarded a prize for the sum of $50 each. All prize-winning or purchased designs become the property of Thonet Bros., who reserve the right to make any alterations necessitated by technical requirements during production. The jury is composed of the following: Mr. Oliver P. Bernard, London; Architects Le Corbusier-Pierre Jeanneret, Paris; Architekt Prof. Dr. Josef Frank, Vienna; Prof. Edmund Farago, Budapest; Prof. Joseph Gocar, Rektor der Akademie der Bildenden Kuenste, Prague; Architekt Prof. Bruno Paul, Berlin; Prof. Enrico Griffini, Milan; Architekt Gerrit Rietveld, Utrecht; Architekt Gustav Siegel, Vienna; Ing. Architekt Rudolf Swierczynski, Warsaw; Architekt Prof. Adolf G. Schneck, Stuttgart; Direktor Hans Weill, Vienna; Baumeister Ernst Wiesner, Akademischer Architekt, Bruenn. The presence of at least five of the above gentlemen constitutes a quorum. Particulars from Thonet Bros. Ltd., 64 Great Eastern Street, London, E.C.2, or from any of the firm's other branches.

No date. Messrs. Kerner, Greenwood & Co., Ltd., offer for award a studentship, value £25, open to any member of the School of Architecture, University College, Dublin. It will be awarded to the student who submits what is adjudged by the jury of award to be the best set of measured drawings prepared at any time during the year of entry. The prize is to be used towards defraying the expenses of the student in travelling and making measured drawings of work of architectural interest and merit. The student to whom the award is made will be expected to undertake some definite piece of work, such as a complete survey of a building. He will be required to select a subject promptly after the award is made and submit same to the principals of the school for approval. When approval is given, two-thirds of the amount of the studentship will be paid, and the balance when the completed drawings are submitted to and approved by the principals, which must be within one year of the date of the award.

THE BUILDINGS ILLUSTRATED

Following are the contractors and some of the sub-contractors for the buildings illustrated in this issue:

The William Booth Memorial Building (pages 46-54). General contractors, Griggs and Son. Sub-contractors: Thomas Faldo & Co., asphalt; J. A. King & Co., concrete blocks and partitions; London and Wales Steel Construction Co., reinforced concrete, structural steel, fireproof construction, iron staircases, revolving doors, and sunblinds; Ames and Finnis, tiles and bricks; Goldstein, glass; Heywood & Co., patent glazing; Edward Evans and Son, patent flooring; Adamite Co., Ltd., Colemanoid waterproofing materials; G. L. Haden and Sons, ventilation and central heating; Griersons, bells, telephones, electrical wiring, electric light fixtures, and electric heating; J. Smith and Son, plumbing and sanitary fittings; Carter & Co., staircases and tiling; Brunswick Metal Casement and Engineering Co., casements; Educational Supply Association, Ltd., folding partitions; Marconi, relay telephones; Blunt and Wray, metalwork; Mason & Co., joinery; Express Lift Co., lift; Greenway & Ludlow, Ltd., Commanderie Travertin Stone from Fevre & Cie's Lorraine quarries for the exterior dressings, and for the interior decorative work in the entrance hall of the administrative building, Travertin D'Artiges (Jaune) procured from the quarries of Messrs. Fevre & Cie, Paris, Belgium black marble, &c.

Cambridge Unitarian Church (pages 57-59). General contractor, W. Sindall, who also executed the oakwork. Sub-contractors: G. and A. Brown, decorative plasterwork and carving of oakwork; Birmingham Guild, Ltd., brass lectern, fanlights, door furniture, and vases; Welstead, Ltd., steel-cored lead glazing; Elsleys, wrought-iron gates; Mathew Hall & Co., heating; Baily, Grundy and Barrett; General Electric Co., pendants; Farmer and Brindley, marble.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

19205. Baines, J. Fire-resisting doors, &c. June 22.

19164. Commin, F. J. Jointing roofing, &c., sheets. June 21.

19030. Craven, J. Materials for damp-courses, &c. June 20.

19031. Craven, J. Caulking or packing material. June 20.

18711. Freyssinet, E. Manufacture of articles of reinforced concrete. June 18.

SPECIFICATIONS PUBLISHED

313508. Fowler, T. W. Method of and apparatus for forming and erecting concrete slabs for the walls of buildings.

313510. Brown, W. L. Lowe. Concrete structures.

313331. Holmes, H., and Holmes, R. S. Centre-closing stiles and rails for sliding doors, windows, sashes, frames, and the like.

313766. Bilbie, J. P. Bricks and the like.

313804. Allix, J. P. Paddling or swimming pools.

ABSTRACT PUBLISHED

311157. Smith, F. B., 58 Sutter Street, San Francisco, U.S.A. Subaqueous structures.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BERMONDSEY B.C. is to erect a branch library, baths, and maternity centre in Silver Street at a cost of £16,434.

The LEWISHAM B.C. is to erect disinfecting and cleansing stations at Weirside Road, at a cost of £9,750.

The L.C.C. Education Committee has approved plans for rebuilding the elementary school at Glengall Road, POPLAR, at a cost of £33,000.

The BERMONDSEY B.C. is to erect a disinfecting station at Neckinger, at a cost of £16,792, and is also to construct a convenience at Tooley Street at a cost of £2,500.

The L.C.C. Education Committee has approved preliminary plans for the erection of an elementary school at Back Alley, BOW, at an estimated cost of £18,000.

At a meeting of the WANDSWORTH Borough Council it was reported that the General Purposes Committee had had under consideration the question of the steps which should be taken with a view to proceeding with a scheme for the erection of buildings to house the Council's staff, in furtherance of the policy of the Council to centralize all their departments on one site. The land owned by the Council in the neighbourhood of the Town Hall was insufficient for that purpose and, accordingly, with the Council's authority and in consultation with the chairman of the Finance Committee, various properties had been acquired.

Plans passed by the LEWISHAM B.C.: Houses, site abutting upon Lawrie Park Avenue and Westwood Road, Sydenham, for Mr. R. E. Smith; six houses, Southend Lane, for Mr. A. J. Glock; house, Hither Green Lane and Duncrievie Road, for Messrs. Middletons, Ltd.; ten houses, Crantock Road, for Mr. H. R. Watt; additions, Gleniffer Laundry, for Mr. S. F. Prior; temporary church, Moorside Road, for Messrs. Wm. Harbrow, Ltd.; additions to R.C. church, Brockley Park, for Mr. Wilfred C. Mangan; building "Delphine" Cinema, Bromley Road, for Mr. W. J. King; two houses, Hither Green, and four houses, Duncrievie Road, for Messrs. Middletons, Ltd.

SOUTHERN COUNTIES

The GRAVESEND Corporation is negotiating for land for the erection of further houses.

The GRAVESEND Corporation is being asked to consider the provision of slipper baths and the extension of the swimming baths.

Messrs. Glyn, Mills & Co., bankers, are aquiring a site at Carfax, OXFORD, for the erection of buildings estimated to cost £25,000.

The HAMPSHIRE Education Committee is acquiring a site at Brockenhurst for the erection of a secondary school.

The EASTBOURNE Corporation has asked the borough engineer to prepare plans for the erection of twenty-eight houses at West Crescent, and fifty houses on the Gilbert site.

The GUILDFORD Corporation Municipal Buildings Committee recommends a scheme prepared by Mr. T. R. Clemance, architect, for adapting premises in High Street for municipal offices, and suggests accepting the tender, £13,029, of Messrs. W. Bullen and Son for the work.

Plans passed by the OXFORD Corporation: Two houses, George Street, Summertown, for Messrs. H. Martin, Ltd.; garage and store, Osney Lane, for The Anglo-American Oil Co.; bungalow, York Avenue, for Mr. E. Miles; house, Rose Hill, for Mr. F. C. Wood; house, Crescent Road, Cowley, for Mr. T. W. George; squash racquets courts, Rose Place, for Mr. G. Brown; house, Summerhill Road, for Mr. F. Watts; extensions, Edmund Road, Cowley, for Morris Garages, Ltd.; house, Beech Road, Headington, for Mrs. Hartwell; house, School Place, Hinksey, for Messrs. Hinkins and Frewin; house, Snadfield Road, for Mr. C. Green; club-house, Crescent Road, Cowley, for Morris Motors Sports Club; two houses, Fairacres Road, for Mr. A. G. H. Simmonds; house, London Road, Headington, for Mr. W. T. Cook; extensions, New-Inn-Hall Street, for The Counties Press, Ltd.; buildings, 73 and 75 George Street, for Messrs. Oliver and Sons; house, Botley Road, for Mr. F. W. Martin; house, Barton Lane, for Mr. T. A. P. Stewart; house, High Street, Wolvercote, for Mr. E. Rawlins; house, Chestnut Grove, Headington, for Mr. W. Hole; house, Old Road, Headington, for Mr. J. E. Jefferson; shop, London Road, Headington, for Mr. S. P. Griffin; alterations, Swan Brewery, Paradise Street, for Messrs. G. E. Weeks & Co.; extensions, Binsey Lane, for The Alden Press, Ltd.; two houses, Green Lane, Headington, for Miss Grant; bungalow, Edgeway Road, for Mr. F. Weller; alterations to 18–22 High Street, for Brasenose College trustees; bungalow, Chestnut Grove, for Mr. H. W. Jacobs; house, Stapleton Road, for Mr. W. J. Davies; house, Bickerton Road, Headington, for Mr. W. A. Varney; house, Capel Close, for Mr. H. Collier; house, Summerhill Road, for Messrs. Hunt and Church.

Plans passed at POOLE: Dwelling-house, Gordon Road, for Brailsford and Wood, Ltd.; oil and spirit depot, off Hamworthy Road, for the British Petroleum Co., Ltd.; addition, "The Bungalow," Martello Road, for H. J. Hillman for Mrs. Little; proposed new road off Mansfield Road, for H. J. Vick, for A. S. H. Whitelock; dwelling-house, Winifred Road, for E. C. M. Graham, for A. Baker; four dwelling-houses, Albert Avenue, for Crabb and Crabb; dwelling-house, Sunnyside Road, for J. G. Stone; extension to workshop rear 1 Layton Road, for W. C. Smart; dwelling-house, Houlton Road, for W. G. Crane and Son, for E. K. Galloway; dwelling-house and garage, Pinewood Road, for Jackson and Greenen, for R. J. M. Nabney; dwelling-house and shop, corner Wroxham and Valley Roads, for F. Lawrence, for Stretch, Baxter and Curry; dwelling-house, Pearce Avenue, for H. J. Hillman; dwelling-house, Bournemouth Road, for J. Allner, for Mrs. Turl; garage, Serpentine Lane, for J. W. Hescroff; garage, Orchard Avenue, for S. Burge; addition to dwelling-house, "Bramley," Dorchester Road, for G. Hoare, for Mr. Budgen; garage, off Blandford Road, for H. F. Payne; dwelling-house, corner Cliff Drive and St. Clair Road, for W. B. Chinchen, for A. M. Kilby; dwelling-house, Sandbanks Road, for A. D. Saunders, for F. Geall; two dwelling-houses, Weymouth Road, for A. J. Dacombe; four dwelling-houses, Alder Road, for A. Orford; dwelling-house, Canford Cliffs Road, for T. E. Grimes, for C. E. Best; dwelling-house, Elms Avenue, for Maggs and Maggs, for Miss F. Clinton; dwelling-house, Harbour Hill Road, for E. C. Markby; addition to dwelling-house, "Casanara," Western Avenue, for Philpotts and Manners, for A. H. Marshall; dwelling-house and garage, Canford Cliffs Avenue, for Philpotts and Manners; dwelling-house, Herbert Avenue, for M. J. Lawford; dwelling-house, Herbert Avenue, for M. J. Lawford; four dwelling-houses and four garages, Lakeside Road, for S. Whitelock & Co., for A. S. H. Whitelock; dwelling-house, Herbert Avenue, for M. J. Lawford; amended plan of dwelling-house, Buckland Road, for H. J. Taylor; dwelling-house, Gloucester Road, for Philpotts and Manners; dwelling-house, Gloucester Road, for Phillpotts and Manners, dwelling-house, Gloucester Road, for Phillpotts and Manners; dwelling-house, Gloucester Road, for Philpotts and Manners; dwelling-house, Ringwood Road, for S. C. Rowden; dwelling-house, Harbour Hill Road, for A. G. Gray, for F. Allen; five dwelling-houses, Bourne Vale Road, for Philpotts and Manners; two dwelling-houses, Gloucester Road, for Philpotts and Manners; five shops and dwelling-houses, over corner Sea View Road and Croft Road, for Brailsford and Wood, Ltd.; dwelling-house, Harbour Hill Road, for Bartlett and Whiffen, for A. Dean; porch addition to dwelling-house, 444 Ashley Road, for H. Walton, for Miss Barton; pair semi-detached dwelling-houses, Gloucester Road, for Philpotts and Manners; pair semi-detached dwelling-houses, Houlton Road, for H. E. Cobb, for Cobb and Barnes; dwelling-house, Winston Avenue, for P. G. Bartlett; dwelling-house, off Hunt Road, for S. G. Wheatley, for Mrs. C. E. Wyatt; dwelling-house, Frankland Crescent, for A. N. Patterson, for J. B. Short; dwelling-house, Island Road, for A. N. Patterson, for Miss E. King; amended plan of dwelling-house, Harbour Hill Road, for J. Jagger; semi-detached dwelling-house, Enfield Road, for A. Mabey; two dwelling-houses, Harbour Hill Road, for Corbin and Clark; dwelling-house and garage, Stanley Green Road, for R. C. Webber, for A. G. Taylor; dwelling-house, off Panorama Road, for Rumsby and Rodd, for Captain Collis; dwelling-house, Banks Road, for Stephens and Crabb, for Dr. Ross MacMahon; dwelling-house, Churchfield Road, for Bromby Bros., for A. J. Grant; dwelling-house, Sunnyside Road, for Mrs. A. E. Day; dwelling-house, Sunnyside Road, for Mrs. A. E. Day; conversion of dwelling-house into bank premises, corner Longfleet and Parkstone Roads, for F. S. Elgar, for Lloyds Bank, Ltd.; dwelling-house, Winifred Road, for E. F. Knight, for G. Best; two dwelling-houses, Bourne Vale Road, for Philpotts and Manners, for Baker and Dore; additions, "Raby Cottage," Western Avenue, for Philpotts and Manners, for Mrs. Forwood; porch addition to dwelling-house, Surrey Road, for T. E. Grimes, for H. Haskins; pair semi-detached dwelling-houses, Oakfield Road, for P. J. Crane; dwelling-house and garage, Western Avenue, for H. R. Collins, for A. Williams; amended plan of four shops and dwelling-houses and one lock-up shop, Poole Road, for F. J. Marks; store, Dalling Road, for B. and P. E. Supply Co., Ltd.; garage, "Lingwood," Grasmere Road, for J. Cole; garage, Morrison Avenue, for E. J. Giles; garage, "Pinklands," Banks Road, for M. W. Joass; garage, 102 Ashley Road, for P. Stuart-Smith; bedroom, "Pine Tree Hut," Brownsea Road, for P. Gilmer; garage, Wesley Road, for A. J. Dacombe; garage, Wesley Road, for A. J. Dacombe; garage rear "The Haven Cellars," Penn Hill Avenue, for D. H. Ridout; timber shed, Pottery Road, for Sherry and Haycock, Ltd.; store, Lower Hamworthy Road, for J. Allner, for The Anglo-Dutch Petroleum Co., Ltd.; garage, Banks Road, for Stephens and Crabb, for Dr. Ross MacMahon; garage, "Ashlan," Fernside Road, for A. W. Pearce.

SOUTH-WESTERN COUNTIES

The TORQUAY Corporation has decided to obtain land at Hele for the erection of 200 houses.

The TORQUAY Corporation is to construct a new footpath from Princess Pier to Abbey Crescent at a cost of £20,600.

The TORQUAY Corporation Baths Committee is considering sites for the proposed swimming bath for children.

The TORQUAY Corporation has passed plans submitted by Burlington Picture House, Ltd., for the erection of a new cinema at Castle Circus.

The TORQUAY Corporation has approved a scheme submitted by the harbour engineer for widening the roads around the harbour generally, including the provision of a central slipway, at an estimated cost of £35,000.

Plans passed by the TORQUAY Corporation: House, Hatfield Road, for Mr. T. Easterbrook; house, St. Marychurch Road, for Mrs. D. V. Price; six houses, Warberry Vale estate, for Mr. H. I. Heard; warehouse, Alexandra Road, for Messrs. C. J. Dimond and Son; two houses, Enfield Road, for Miss Moucher; additions, Freemasons' Lodge, St. Marychurch, for the Lodge; workshops and reading-room, Ilsham Road, for Mr. Deakins; alterations, Reddenhill Road, for Messrs. Eastmans, Ltd.; house, Abbey Crescent, for Miss Turner; dairy, Hele Cross, for the Torquay Co-operative Society; house, Teignmouth Road, for Mr. A. Hardwick; house, Hampton estate, for Mrs. Drower; house, Teignmouth Road, for Mr. C. Lax; bungalow, Parkhurst Road, for Mr. F. Nicholls; house, new road off Hennapyn Hill, for Mr. T. C. Green; school, Barton Hill Road, for the Torquay Education Authority; house, Barton Hill Road, for St. Martin's Church Council; house, Hennapyn Hill, for Mr. J. Watson; two houses, Newton Road, for Mr. J. Tucker; house, Mead Road, for Mr. J. D. Hawke.

NORTHERN COUNTIES

The BIRKENHEAD Corporation has leased to Messrs. Paterson and Thomas a site for a mission hall in Gautby Road.

The SALFORD Corporation Improvements Committee is being asked to consider the provision of a footbridge over the Irwell near Lower Kersal.

The YORK Corporation Tramways Committee recommends obtaining tenders for the erection of a bus garage at Fulford.

The MANCHESTER Corporation Housing Committee has prepared a scheme for the erection of 780 houses on the Chorlton estate.

The HULL city architect is to obtain tenders for the erection of houses and shops in connection with the New Street rehousing scheme.

The HULL city architect has prepared plans for the erection of an operating theatre at the infectious disease hospital at a cost of £6,500.

The BIRKENHEAD Corporation is seeking sanction to borrow £54,596 for the erection of fifty parlour and 132 non-parlour houses, including supervision, in Albany Road and Bedford Avenue.

The SHEFFIELD Corporation has obtained sanction to borrow £30,000 in connection with the erection of new workshops for the blind at Sharrow Lane.

The OLDHAM Corporation has passed plans for extension to pavilion, Warren Lane, for the Park Tennis Club, and five houses, Miller Road, for Messrs. Hawthorn and W. and H. Bloor, Ltd.

The BRADFORD Corporation now proposes to proceed with the scheme for the provision of a central motor garage at Canal Road in accordance with plans prepared by the city architect. The cost is estimated at £22,000.

SCOTLAND

The Roman Catholic monastery and schools at Fort Augustus are to be removed to the outskirts of EDINBURGH, where new buildings are to be erected. The new buildings will consist mainly of a monastery, which will accommodate 100 monks and 100 lay brothers, an abbey church to accommodate over 1,000 of a congregation, a college with twenty-five classrooms, and a large study block. There will also be ten boarding-houses, with dining halls, each to accommodate fifty boys, a self-contained hospital with fifty beds, swimming baths and a large gymnasium, an administration block, and playing fields. The total cost of the whole scheme, which will take fifteen years to complete, is estimated at about £600,000.

At a meeting of the GLASGOW Corporation Statute Labour Committee the town clerk reported that he had received on behalf of the Corporation a service copy of a petition at the instance of Mr. A. E. Pickard to the Dean of Guild Court for permission to erect a picture house in Paisley Road west, and Ibroxholm Avenue, contiguous to ground acquired by the Corporation in connection with the new road to Renfrew. The committee, after consideration of the matter, and having heard the Master of Works as to the plans, and the town clerk as to the terms of the title held by the Corporation, agreed to recommend that no action be taken in connection with the petition.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_1	BANBURY ..	S. Counties	1 4½	1 0½*
B	Bangor ..	N.W. Counties	1 5	1 0½
A	Barnard Castle	N.E. Coast	1 7½	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A	Consett ..	N.E. Coast	1 7½	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	.....	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth	S. Wales & M.	1 7½	1 2½
A	S. and E. Glamorganshire Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_2	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour*; LABOURER, 1s. 4d. *per hour*; NAVVY, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 10 0
Pit gravel, per yd.	0 15 0
Pit sand, per yd.	0 12 6
Washed sand, per yd.	0 13 0
Screened ballast or gravel, add 10 per cent. per yd.	
Clinker, breeze, etc., prices according to locality.	
Portland cement, per ton	£2 8 0
Lias lime, per ton	2 0 0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.	
Transport hire per day:	
Cart and horse £1 3 0 *Trailer*	£0 15 0
3-ton motor lorry 3 15 0 *Steam roller*	4 5 0
Steam lorry, 5-ton 4 0 0 *Water cart*	1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0 1 6
SPREAD and level, including wheeling, per yd.	0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0 10 6
TRIMMING earth to slopes, per yd. sup.	0 0 6
HACKING up old grano. or similar paving, per yd. sup.	0 1 3
PLANKING to excavations, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.	
IF left in, add to above prices, per ft. cube	0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0 2 1
DO. 6 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube	2 3 0
DO. 6-2-1, per yd. cube	1 18 0
DO. in upper floors, add 15 per cent.	
DO. in reinforced-concrete work, add 20 per cent.	
DO. in underpinning, add 60 per cent.	
LIAS-LIME CONCRETE, per yd. cube	£1 16 0
BREEZE CONCRETE, per yd. cube	1 7 0
DO. in lintels, etc., per ft. cube	0 1 6
CEMENT concrete 4-2-1 in lintels packed around reinforcement, per ft. cube	0 3 9
FINE concrete benching to bottom of manholes, per ft. cube	0 3 0
FINISHING surface of concrete spade face, per yd. sup.	0 0 9

DRAINER

LABOURER, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; BRICKLAYER, 1s. 9d. *per hour*; PLUMBER, 1s. 9d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0 0 10
DO. 6 *in., per ft.*	0 1 3
DO. 9 *in., per ft.*	0 2 3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 5 6
DO. 6 *in., per yd.*	0 8 0
Portland cement and sand, see "Excavator" above.	
Leadwool, per cwt.	£2 0 0
Gaskin, per lb.	0 0 4½
STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0 4 3
DO. 6 in., per ft.	0 5 0
DO. 9 in., per ft.	0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0 8 3
DO. 6 in., per ft.	0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour*; LABOURER, 1s. 4d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4 5 0
Flettons, per M.	2 12 6
White facing bricks, per M.	5 0 0
Multi-coloured facings, per M.	7 7 9
Best red facings, per M.	7 7 9
Rubbers, 9¼ in., per M.	12 0 6
Staffordshire blue, per M.	9 5 0
Firebricks, 2½ in., per M.	9 0 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. *headers, per M.*	20 10 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	
Lime, grey stone, per ton	£2 11 6
Mixed lime mortar, per yd.	1 6 0
Dampcourse, in rolls of 4½ in., per roll	0 2 6
DO. 9 *in. per roll*	0 4 9
DO. 14 *in. per roll*	0 7 6
DO. 18 *in. per roll*	0 9 6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32 0 0
DO. in cement do., per rod	34 10 0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0 1 0
BEDDING plates in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING do. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
DO. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
DO. picked stocks, per ft. sup. extra	0 0 7
DO. red rubbers gauged and set in putty, per ft. sup. extra	0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in. per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around gullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

MASON

MASON, 1s. 9d. *per hour*; DO. *fixer*, 1s. 10d. *per hour*; LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 9
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 11 0
York templates sawn, per ft. cube	0 7 6
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	
HOISTING and setting stone, per ft. cube	£0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.	
PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup.	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do., per ft. run	0 1 4
HALF SAWING, per ft. sup.	0 1 0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	£0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 7 6
YORK SILLS, W. & T., ft. cub. fixed	1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0 1 6
DO. 2½ in. thick, per ft. sup.	0 1 3

SLATER AND TILER

SLATER, 1s. 9d. *per hour*; TILER, 1s. 9d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:	
Portmadoc Ladies	£13 0 0
Countess	25 0 0
Duchess	32 0 0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8 3 9
Grey-green do., per ton	7 3 9
Green peggies, 12 in. to 8 in. long, per ton	5 13 9
In 4-ton truck loads, delivered Nine Elms station.	
Clips, lead per lb.	£0 0 6
Clips, copper, per lb.	0 2 0
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 2 2
Cement and sand, see "Excavator," etc., above.	
Hand-made tiles, per M	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
DO. *Peggies, per ton*	7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6 7 0
Grey-green do.	5 9 0
Green peggies, 12 in. to 8 in. long	4 13 6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	4 0 0
DO., machine-made do., per square	3 10 0
Vertical Tiling, including pointing, add 18s. 0d. per square.	
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour*; JOINER, 1s. 9d. *per hour*; LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):	
7 × 3, per std.	£22 0 0
11 × 4, per std.	30 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 5 0
DO. *T. and G., 1 in., per sq.*	1 5 0
Planed boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 1 4
Mahogany, Honduras, per ft. sup. of 1 in.	0 1 4
DO. *Cuba, per ft. sup. of 1 in.*	0 2 6
DO., *African, per ft. sup.*	0 1 3
Teak, per ft. sup. of 1 in.	0 1 3
DO., *ft. cube*	0 14 0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 5 0
DO. framed in floors, roofs, etc., per ft. cube	0 6 0
DO. framed in trusses, etc., including ironwork, per ft. cube	0 8 6
PITCH PINE, add 33⅓ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO. 3-ply per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	2 10 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0 0 4½
DO. 9 in. wide and over per ft. sup.	0 1 2

[continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ¾ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	6
If ramped, per ft. run	0	5	0
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 9½d. *per hour*; MATE, *do.* 1s. 4d. *per hour*; ERECTOR, 1s. 9½d. *per hour*; FITTER, 1s. 9½d. *per hour*; LABOURER, 1s. 4d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1s. 9½d. *per hour*; MATE OR LABOURER, 1s. 4½d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc. per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 9½d. *per hour (plus allowances in London only)*; LABOURER, 1s. 4d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	2	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 8d. *per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ¼ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0		1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1s. 6d. to 2s. per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1s. 8d. *per hour*; LABOURER, 1s. 4d. *per hour*; FRENCH POLISHER, 1s. 9d. *per hour*; PAPERHANGER, 1s. 8d. *per hour.*

Genuine white lead, per cwt.	£3	1	6
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement.
Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	5½	3	2	6	4	3	9½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, JULY 17

R.I.B.A., 9 Conduit Street, W.1. Tite Final "en loge" Competition.

ROYAL SANITARY INSTITUTE CONGRESS AT SHEFFIELD. Meetings of Architecture and Engineering section in the Firth College, and Representatives of Sanitary Authorities in the Town Hall. 10 a.m. Visit to Waterworks, Sewage Disposal Works, Iron, Steel, Silver-plate, and Cutlery Works. 2 p.m. **10 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Woodwork." By T. F. Wilson, F.R.S.A.I. "Ironwork." By Miss M. Chamot. **3 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C. Exhibition of Egyptian Antiquities. Open daily till July 27, from 10 a.m. to 5 p.m. July 19 from 6.30 to 8.30 p.m. **10 a.m.**

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Annual Exhibition of Students' Work. Open until July 27.

THURSDAY, JULY 18

R.I.B.A., 9 Conduit Street, W.1. Soane Final "en loge" Competition.

ROYAL SANITARY INSTITUTE CONGRESS AT SHEFFIELD. Meetings of Architecture and Health section in the Firth College, 10 a.m. Congress Dinner, Grand Hotel, 7.30 p.m. **10 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Medieval Sculpture." By Miss M. Chamot. **12 noon.**

FRIDAY, JULY 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Woodwork." By T. F. Wilson, F.R.S.A.I. 12 noon. "Seventeenth-century Wall Decoration." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

LONDON SOCIETY. Visit to Hampton Court and William IV's Banqueting Hall. Exhibition of Tennis in the Old Court. Train from Waterloo at 1.55 p.m.; meet at the bridge, over the old moat at 2.45 p.m. **1.55 p.m.**

SATURDAY, JULY 20

Sunrise, 5.5. Sunset, 9.6.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Furniture." By Miss M. Chamot. **12 noon.**

SOUTH-EASTERN SOCIETY OF ARCHITECTS. Visit to Reigate of the Guildford and Croydon Chapters. Assembly at the Municipal Buildings, Reigate. Visits to (a) St. Mary's Parish Church, Portions, Circa 1200; (b) The Crypt of the Market House, Circa 1350; (c) Reigate Priory (by permission of Earl Beatty). 12.30 o'clock. Luncheon at the White Hart Hotel, Reigate. 2 o'clock. Visits by motor-cars and charabancs to: (a) Gatton Hall (by permission of Sir Jeremiah Colman, Bt.); (b) Gatton Park and Church; (c) Pendell Court, sixteenth century (by permission of Mrs. W. A. Bell), and other sixteenth and seventeenth-century houses; (d) Bletchingley Village and Church. **10.30 a.m.**

LONDON COUNTY HALL, Westminster Bridge Road, S.E.1. Exhibition of Prints and Watercolours: "Views of Old London." Open to the public every Saturday from 10.30 a.m. to 12 noon, and 1.30 p.m. to 3.30 p.m. Bank Holidays from 10.30 a.m. to 12 noon, and 1.30 p.m. to 4.30 p.m. **10.30 a.m.**

MONDAY, JULY 22

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Persian Metalwork." By T. F. Wilson, F.R.S.A.I. "Gothic Woodwork." By Miss M. Chamot. 12 noon. "Far Eastern Pottery." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

R.I.B.A., 9 Conduit Street, W.1. Exhibition of Photographs of Modern American Skyscrapers. Open daily between 10 a.m. and 7 p.m. to Friday, August 2. (Saturday 2 p.m.). Visit to U.S.A. Arrival of s.s. "Laconia" at New York. Accommodation at Pennsylvania Hotel.

IMPERIAL GALLERY OF ART, Imperial Institute, South Kensington, S.W. Rome Scholarship in Architecture. Exhibition of drawings submitted in 1929 final competition. Open until July 20.

NORTHAMPTONSHIRE, BEDFORDSHIRE AND HUNTINGDONSHIRE ASSOCIATION OF ARCHITECTS. Summer Meeting at Kettering and district. Assemble at the George Hotel at 10.45 a.m. **10.45 a.m.**

TUESDAY, JULY 23

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Stained Glass." By Miss M. Chamot. **12 noon.**

WEDNESDAY, JULY 24

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Board of Architectural Education. "The Building of the New Horticultural Hall." By J. Murray Easton, F.R.I.B.A. **8 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Architecture." By T. F. Wilson, F.R.S.A.I. "Persian Pottery." By Miss M. Chamot. **3 p.m.**

LONDON SOCIETY. Motor Coach Excursion to typical London open spaces, concluding with tea at Avery Hill, Eltham. Tickets: Price 5s. each, including tea and gratuities. Return to town about 6.30 p.m. Applications to the Secretary, Lancaster House, St. James's, S.W.1. **2.15 p.m.**

THURSDAY, JULY 25

R.I.B.A. Visit to U.S.A. Day at New York. Departure at 4.08 p.m., via Baltimore and Ohio Railroad for Washington. Arrival at 9.50 p.m. Accommodation at Washington Hotel.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By Miss M. Chamot. 12 noon. "Italian Decoration." By Miss M. Chamot. 3 p.m. **12 noon.**

FRIDAY, JULY 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Georgian Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Eighteenth-century Wall Decoration." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

SATURDAY, JULY 27

Sunrise, 5.15. Sunset, 8.57.

R.I.B.A. Visit to U.S.A. Arrival at Detroit, 8.30 a.m. Accommodation at Statler Hotel. Sightseeing by motor.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "General Tour." By T. F. Wilson, F.R.S.A.I.; "French Renaissance Art." By Miss M. Chamot. 3 p.m. "Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. 7 p.m. **3 p.m.**

SUNDAY, JULY 28

R.I.B.A. Visit to U.S.A. Arrival at Niagara Falls, 1.35 p.m. Accommodation at Clifton Hotel.

MONDAY, JULY 29

R.I.B.A. Visit to U.S.A. Departure from Niagara Falls at 11.25 a.m. via electric car, connecting at Lewiston with steamer across Lake Ontario. Arrive at Toronto at 2.45 p.m. Accommodation at King Edward Hotel.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Seventeenth-century Furniture." By Miss M. Chamot. **3 p.m.**

TUESDAY, JULY 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Later English Furniture." By Miss M. Chamot. **3 p.m.**

WEDNESDAY, JULY 31

R.I.B.A. Visit to U.S.A. En Route Montreal, passing Thousand Islands. Arrival at Montreal 5.45 p.m. Accommodation at Windsor Hotel.

THURSDAY, AUGUST 1

R.I.B.A. Visit to U.S.A. Motor sightseeing in the city of Montreal. Departure for Quebec via Canadian National Railways at 5.10 p.m. Arrival at Quebec 9.55 p.m. Accommodation at Chateau Frontenac Hotel.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Pottery." By L. O. Faraker. "Tudor and Jacobean Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Stained Glass." By T. F. Wilson, F.R.S.A.I. 3 p.m. "Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon.**

FRIDAY, AUGUST 2

R.I.B.A. Visit to U.S.A. Motor tour from Quebec to the famous shrine of Ste. Anne de Beaupre, returning by way of Montmorency Falls. Embark in evening on s.s. "Ascania."

SATURDAY, AUGUST 3

Sunrise, 5.26. Sunset, 8.46.

IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY, Imperial Institute Road, South Kensington, S.W.7. Exhibition of Royal Society of Arts Competition of Industrial Designs, 1929. Open daily until September 7.

SUNDAY, AUGUST 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Gifts through the National Art Collections Fund." By Miss E. M. Spiller, O.B.E. 2.45 p.m. "Beauty of Colour." By Miss E. M. Spiller, O.B.E. **3 p.m.**

MONDAY, AUGUST 5

Bank Holiday.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. 12 noon. General Tour. By L. O. Faraker. "English Furniture." By T. F. Wilson, F.R.S.A.I. 3 p.m. General Tour. By L. O. Faraker. **12 noon.**

WEDNESDAY, AUGUST 7

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.1. Indian Section: "Architecture." By Miss M. Chamot. **3 p.m.**

THURSDAY, AUGUST 8

VICTORIA AND ALBERT MUSEUM, South Kensington. S.W.7. "Architecture." By L. O. Faraker. 3 p.m. "Recent Acquisitions." By Miss M. Chamot. **7 p.m.**

SATURDAY, AUGUST 10

Sunrise, 5.37. Sunset, 8.33.

R.I.B.A. Visit to U.S.A. s.s. "Ascania" due to arrive at Plymouth.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. 12 noon. Indian Section: "Sculpture." By Miss M. Chamot. 3 p.m. **12 noon.**

SUNDAY, AUGUST 11

R.I.B.A. Visit to U.S.A. Arrival of s.s. "Ascania" at London.

MONDAY, AUGUST 12

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Furniture (1)." By Miss M. Chamot. 12 noon. "English Furniture (2)." By Miss M. Chamot. 3 p.m. **12 noon.**

TUESDAY, AUGUST 13

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Sculpture." By Miss M. Chamot. 12 noon. "English Primitives." By Miss M. Chamot. 3 p.m. **12 noon.**

SATURDAY, AUGUST 17

Sunrise, 5.47. Sunset, 8.20.

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, Excursion.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By L. O. Faraker. 3 p.m. "Italian Renaissance Furniture." By L. O. Faraker. **7 p.m.**

MONDAY, AUGUST 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. "Spanish Architecture and Sculpture." By Miss M. Chamot. 12 noon. "Spanish Textiles and Pottery." By Miss M. Chamot. 3 p.m. **12 noon.**

TUESDAY, AUGUST 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Tapestries." By Miss M. Chamot. 3 p.m. **3 p.m.**

WEDNESDAY, AUGUST 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Stained Glass." By Miss M. Chamot. **12 noon.**

SATURDAY, AUGUST 31

Sunrise, 6.10. Sunset, 7.50.

A.A.S.T.A. Summer Tour to the Rhineland via the Ardennes and the Moselle. From the evening of August 31 to September 8 or 12.

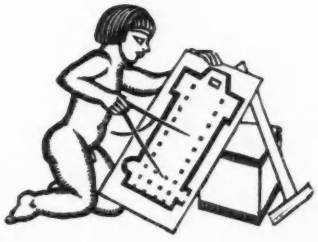


CHARING CROSS STATION SITE, FROM THE RAILWAY BRIDGE.

This study, specially taken for THE ARCHITECTS' JOURNAL *by courtesy of the Southern Railway, shows the extent of the site, between Craven Street, which runs up on the west side of the railway viaduct out of Northumberland Avenue, seen on the left, and Villiers Street, parallel to it on the east side of the station. It embraces the area at present occupied by the six lines and their respective island platforms and the Charing Cross Hotel, the top stories of which are visible above the station roof; behind this again is the station forecourt, with Queen Eleanor's Cross. Various schemes for laying out the site were illustrated in our issue for June 19.*

(*See also Astragal's note on page 83.*)

THE ARCHITECTS' JOURNAL



WEDNESDAY, JULY 17, 1929

£ : S. : D.

L's for our Labours. There's something to pay—
See S (that's the scale of the R.I.B.A.)
D's for the Date—the great settlement day.

IT is commonly granted that architects should be paid in some kind for the work they do, but many and conflicting, as the correspondence provoked by "The Honeywood File" suggests, are the views on what constitutes the most appropriate, or most dignified, or even most expeditious manner of reminding clients that fees are due for payment.

It is, we know, laid down in black and white in the R.I.B.A. scale of charges that two-thirds of the total fees shall be due upon signing the contract, and a third at the termination of the work. Now, the architect is in no difficulty in ascertaining how much his charges are, and if he were engaged in the sordid business of selling something to somebody at so much a ton f.o.b. his bill would follow delivery as night follows day.

But his transaction is in no sense commercial. From first introduction to final leave-taking it is intensely personal, for it is concerned, in its real essence, with the building of a private home. The architect, indeed, must be or become the friend of—and at very worst be entertained with the manners of friendship and social equality by—him whom he will advise on the so personal matter of the arrangement of a home.

It is written that to be under obligation for the professional services of friends is to endanger friendship. Let this be taken as some measure of the difficulties that surround the question of architects' fees, and let us not try to create any precedent to deal with anything so variable as the relationships engendered by the contact of very personal architect with very personal client.

One thing is obvious: we must be paid our fees. For the rest, the clearer the statement of responsibility, the easier it will be to keep alive the spirit of understanding upon which so much of the success and the mutual happiness of the work must rest.

Clients know little about the etiquette of architects' payments, and many of them as little about the manner in which builders should be paid. It was not so peculiar in Sir Leslie Brash to juggle with his payments, as he might in the open market, seeing how ignorant he was of the little rules and regulations governing our transactions upon which Spinlove had thrown no enlightenment.

There are these regulations, quite complicated enough to need some explanation; happy is the architect who has sense and tact enough to make clear to his client at an early stage the pretty procedure of the game; the amounts, the times, and the ways of payments. For otherwise the client may imagine that his fees are paid, like a doctor's or a solicitor's, at the end of the year or half-year, and keep him on tenterhooks long after the pleasant flavour of mutual co-operation has evaporated.

Neither is it much use sending a copy of the complicated rigmarole that makes up the official scale of charges of the R.I.B.A. and expecting the client to react in the correct way to something he may very possibly not take the trouble to understand. The scale might be useful in case of dispute, but it is simpler and more direct to make statement of the fees due for the individual case; to say when cheques should be paid, and how it comes about that an architect does most of his work before the foundations are laid.

As in most dealings complicated by personal considerations, clearness in all money matters is the only possible basis of good relationships. There may be rare heights of social elevation, as Karshish suggested, that do not condescend to a discussion of remuneration, but most men are grateful to be told how they stand, and will pay without question what they understand to be fair.

NEWS & TOPICS

OFFICIAL ARCHITECTURE

THE Marquess of Londonderry raised the whirlwind in truth when, at the Architecture Club, he gathered his little ones about him, as it were, and showed them their inheritance. Unfortunately, for him, the race of architects, whose bread he gathers for his own, deny him the right of wholesale patrimony. What is the Office of Works that wisdom should die with it? Is the whole of taste bound up in that lumpy building at the end of Whitehall, and are we to suffer brick and stone for ever? It seems that the Office of Works is to be responsible for some 400 buildings, some of which will cost a quarter of a million pounds. Four hundred buildings in faultless official taste! And cheap into the bargain! 'Tis hard to believe: Sir Bramwell Thomas would have this inquired into, and so would we. So far as we know there is no parallel in other countries for such wholesale officialdom. The Office of Works fell on clover when the war came along, but it is over knee-deep today, and it is harvest time.



A curious view taken looking up the main gallery staircase of Hans Poelzig's famous "Capitol" Cinema in Berlin, and showing the stanchions and skylight.

IT IS A CORKSCREW STAIRCASE

German architectural photographers are notoriously fond of making hair-raising studies of incidental details, and even whole buildings, from æsthetically perverse points of vantage. The one reproduced here is a view looking up the main gallery staircase well of Oberregierungsbaurat, Hans Poelzig's now famous "Capitol" cinema in Berlin. To take it the photographer apparently balanced his camera on his waistcoat. The interior of this staircase cage is austerely finished in plain white plaster, devoid of any mouldings, with the result that, owing to the absence of the usual tell-tale shadows, it is at first difficult for the eye to distinguish the ascending corkscrew band masking the stair-treads from the circular wall enclosing it. The sheer and stark upward thrust of these twin grooved concrete stanchions seems to support nothing except the skylight that crowns them. In reality, however, the spiral staircase is stayed to them by short horizontal beams. The general effect of this photograph is decidedly — even involuntarily—impressive. It exhibits an example of the increasingly adventurous use of reinforced concrete construction on the Continent.

*

NEW R.I.B.A. BUILDING OPEN COMPETITION

The R.I.B.A. are to be congratulated upon their decision to hold an open competition for the design of their new headquarters in Portland Place. Although the responsibility of choosing and upholding a design from among many will be heavy, they will feel that they have made the best use of a golden opportunity, and more than honour is satisfied.

*

HAPHAZARDRY AT CAMBRIDGE

Cambridge used once to contain its beauties within the compass of a little town, lying surrounded by an unspoilt agricultural country. She does not remain untouched by the modern scourge. "Ribbon" development and other forms of haphazardry are strewing confusion about her boundaries, and conscious efforts are needed to preserve what may be so easily lost. Lord Balfour, Chancellor of the University, issues an appeal to find money wherewith to consolidate the purchases of land made by the Cambridge Preservation Society. The purchases have so far aimed at controlling the amenities of the roads, and particularly the Madingley Road, that lead out of the town. They hope further to protect the identity of the neighbouring villages by preserving the agricultural character of the intervening land.

*

No Cambridge man can disconnect in his mind the university from its setting in the fields. The two are so much bound up in the same picture that an appeal to save the setting from disfigurement should find the same generous response so often forthcoming in the cause of scholarship and education. Cambridge might look sadly towards the dismal fate of Oxford's outskirts, for whatever superiority Oxford may claim, it loses heavily when considered as a whole. As I write I am not certain of the result of the æsthetic contest to be staged in this number of THE ARCHITECTS' JOURNAL. Were I umpire I would give my judgment in favour of Cambridge before I left the pavilion—not on points, but generally, and femininely, as favouring the handsomer eleven.

*

"PARKWAYS" IN PLACE OF "RIBBON ROADS"

I was not allowed space last week to fill out my note about "ribbon development"; let me return to the subject. A road leads from one place to another. That is perhaps the most obvious function of a road. But a road develops the countryside, too, and it is that function which has been wholly and entirely neglected by those responsible for the spending of much money. People laugh at arterial roads because they see that they are foolish great things—giants without jobs—striding about the country in three-league boots, with a swarm of flies about them.

*

To use them to full purpose they must be made to preserve beauty, stimulate good development, and allow traffic to pass from one place to another as quickly and quietly as possible. This is what the "parkway" does. When a "parkway" is laid out, land is bought in advance, not in strip lengths, but in wide bands, in field-widths, irregularly,

and with an eye to preserving what may serve to make the road beautiful and pleasant to travel along. Development takes place beyond the boundaries of this "parkway," and its local traffic does not have to interfere with the traffic upon the main road, which, by means of bridges and cuttings, can be rendered proof against the dangers of level crossings, so that it may be swift and safe, and thus more useful.

*

And because the road is made attractive, the land that lies near it is better building land, and is worth more to the owners. In course of time the truth of this will penetrate the consciousness of engineers and county authorities, but in the meantime the Government announces its intention of spending another large block of public money, and for the sake of the country, and our children who follow, it must be seen to that the present type of road gives way to something more useful and beautiful.

*

THE L.C.C. FLATS AT ST. PANCRAS

I have always been a little doubtful about the ambitious buildings for the London County Council on the Ossulston Street site at St. Pancras, and have several times suggested in THE ARCHITECTS' JOURNAL that the estimate of £400,000 for 492 flats might well be exceeded, and that in any case the erection of nine-story tenements to house over 3,000 persons in one of London's danger zones was a risk in view of possible air attack in the future. Nevertheless, Mr. Neville Chamberlain was enthusiastic, and spoke warmly of the idea when he laid the foundation-stone of the new dwellings in February last year. Alas, for the mischances of architectural affairs! The plans have now been drastically modified. The L.C.C. have discreetly decided not to build beyond five or six stories high. The much-vaunted studios from which artists could look across London above the smoke have been ruthlessly lopped off. The cost of the amenities has been found to be too prohibitive, and the scheme will now be confined to housing the 2,557 persons who require accommodation owing to the redevelopment of the Ossulston Street area.

*

CHARING CROSS BRIDGE

Mr. Ramsay MacDonald will earn the lasting gratitude of all architects and will no doubt relieve the late Prime Minister of much of the credit if the long-delayed Charing Cross Bridge scheme comes finally to fruition within the next year or so. There are signs that the meetings of the mighty ones of Railway, Council, and Ministry of Transport are nearing a satisfactory close, and that the removal of Charing Cross Station may be taken as definitely a part of a scheme for a new road bridge leading to a new station on the far side. Two points are worth stressing at this stage.

*

First, have the interminable discussions of the last few years succeeded in disposing of the high-level theory, or are there still those who harbour hazy dreams of roads that sail across the Strand, and on to Oxford Street, and on and on just because one can't bring them satisfactorily to earth? The high-level road as we know it abroad is an abortion that wastes more land and light than it saves time and space. Let us forget it.

Second, before we engage upon the expenditure of many millions of public money, have all the alternative methods of leading in the Southern Railway lines been given consideration? If the exponents of the high-level theory would study the system of railway embankments that have ruined the economic and social aspects of much of South London they would see how chronically wasteful they are. If electrification can be as general as the Southern Railway have made it, there seem no reasons why a system of cuttings and tunnels should not replace the present embankments. It would cost a deal of money, but the economic salvation of South London would turn any capital sum to good account.

*

STOWE SCHOOL'S NEW CHAPEL

The new chapel at Stowe School, opened by Prince George last week, is planned by Sir Robert Lorimer to complete the main school buildings at their western end, and to form, with the existing laboratories and a projected block of classrooms, a large three-sided garden court, open



The new chapel for Stowe School, designed by Sir Robert Lorimer, and opened last week by Prince George. The building is faced externally with stone of a light buff colour.

to the south. Eventually the classrooms, which come nearest to the chapel, will have an elevation repeating that of the laboratories—formerly an orangery. Stowe is a new public school without traditions, but the house itself, remodelled by Robert Adam in 1775, abounds in architectural and social history. The largest of the temples in the grounds, the Temple of Victory and Concord, designed by Kent, had fallen into disrepair, and sixteen of its flanking columns were taken to form the arcading of the new chapel. The woodwork of the old private chapel of Stowe House has been incorporated in the organ gallery and chancel panelling of the new chapel.

*

CONSEQUENCES

"At the rate the schools and universities are pouring young architects into the world it's hard to imagine work for them to do." "Ah, but they will at least form an intelligent lay public."

ASTRAGAL

LONDON SCHOOL OF TROPICAL MEDICINE

VERNER O. REES AND P. MORLEY HORDER:
ASSOCIATED ARCHITECTS

THE London School of Hygiene and Tropical Medicine, to be opened tomorrow, July 18, by the Prince of Wales, stands on a site in Bloomsbury, bounded by Malet, Keppel, and Gower Streets. The foundation stone was laid in July, 1926, by the Right Hon. Neville Chamberlain, then Minister of Health. The main entrance is in Keppel Street, and gives immediate access to the administration department, to the lecture hall, and to the library and museums on the first, second, and third floors. The remainder of the plan is laid out in the form of the letter H, with secondary entrances from Gower and Malet Streets, and staircases in the centre bay of the H.

Immediately facing the main entrance is the lecture theatre, with accommodation for nearly 300 seats. In this theatre is a screen for lantern and cinema displays.

An important feature of the cinema is an ingenious apparatus by means of which slow-motion pictures may be given or a film stopped to depict any particular action or event upon which it is the lecturer's wish to give special emphasis. In the past it has been regarded as impossible to stop a film until it has run its course, owing to the great danger of fire.

The accommodation for the teaching and research departments comprises departments of sanitary science and tropical medicine, bacteriology, chemistry and bio-chemistry, vital statistics and immunology and medical biology.

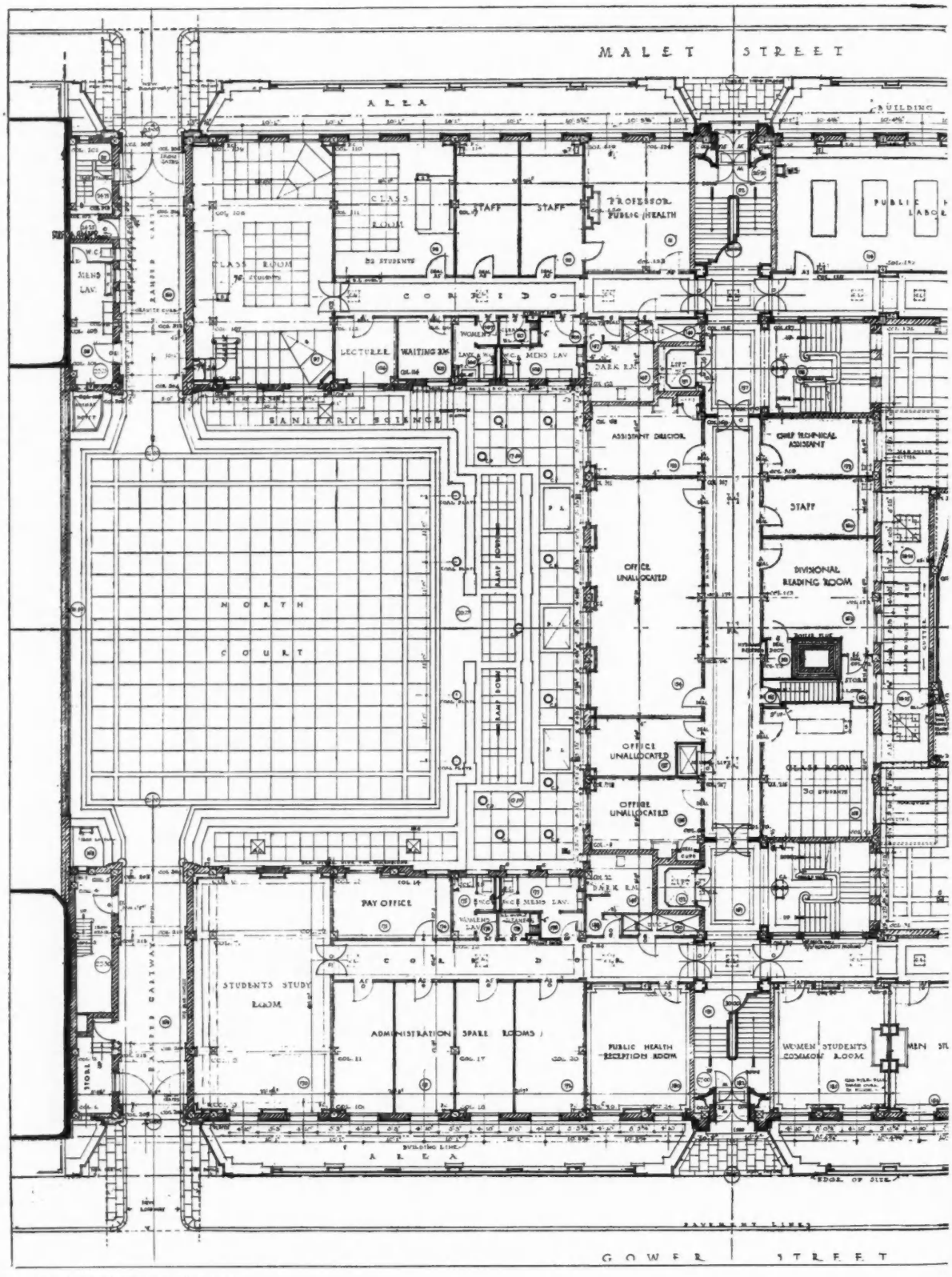
On the fourth and fifth floors is extensive provision for animal quarters, and there is a large basement for X-ray work, post-mortem of animals, workshops, museum storage, students' lavatories, etc.



The London School of Hygiene and Tropical Medicine will be opened by the Prince of Wales tomorrow. It stands on a corner site in Bloomsbury, bounded by Keppel Street, in which is the main entrance shown above, Gower Street, and Malet Street.

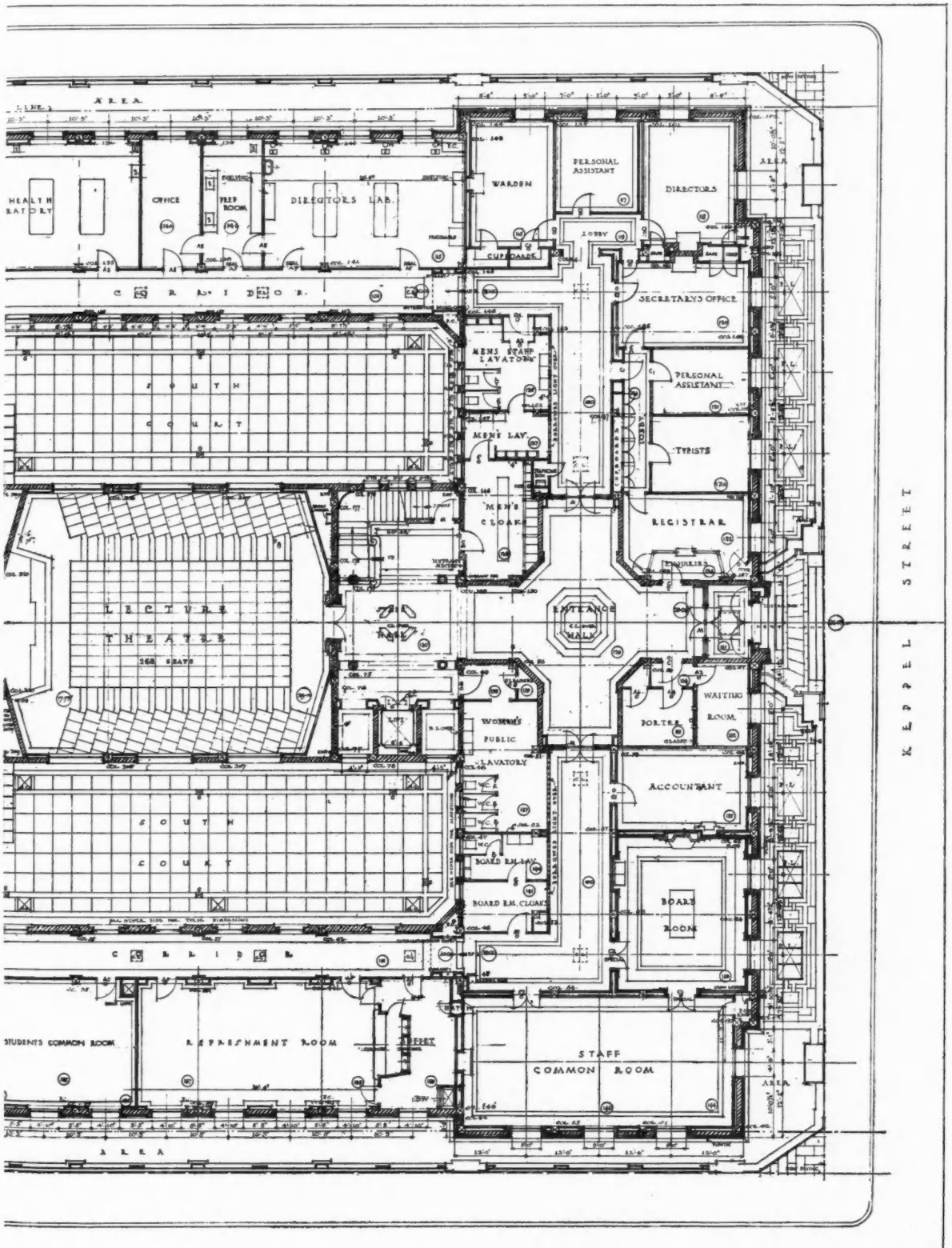
London School of Tropical Medicine. [*Verner O. Rees and P. Morley Horder: Associated Architects.*

A general view of the Gower Street (left) and Keppel Street façades. The librarian's department, on the first floor, and the museums on the second and third floors, extend the whole length of the main Keppel Street front. Along the upper elevations are carved the names of men world-famous for their investigations in hygiene and medicine.



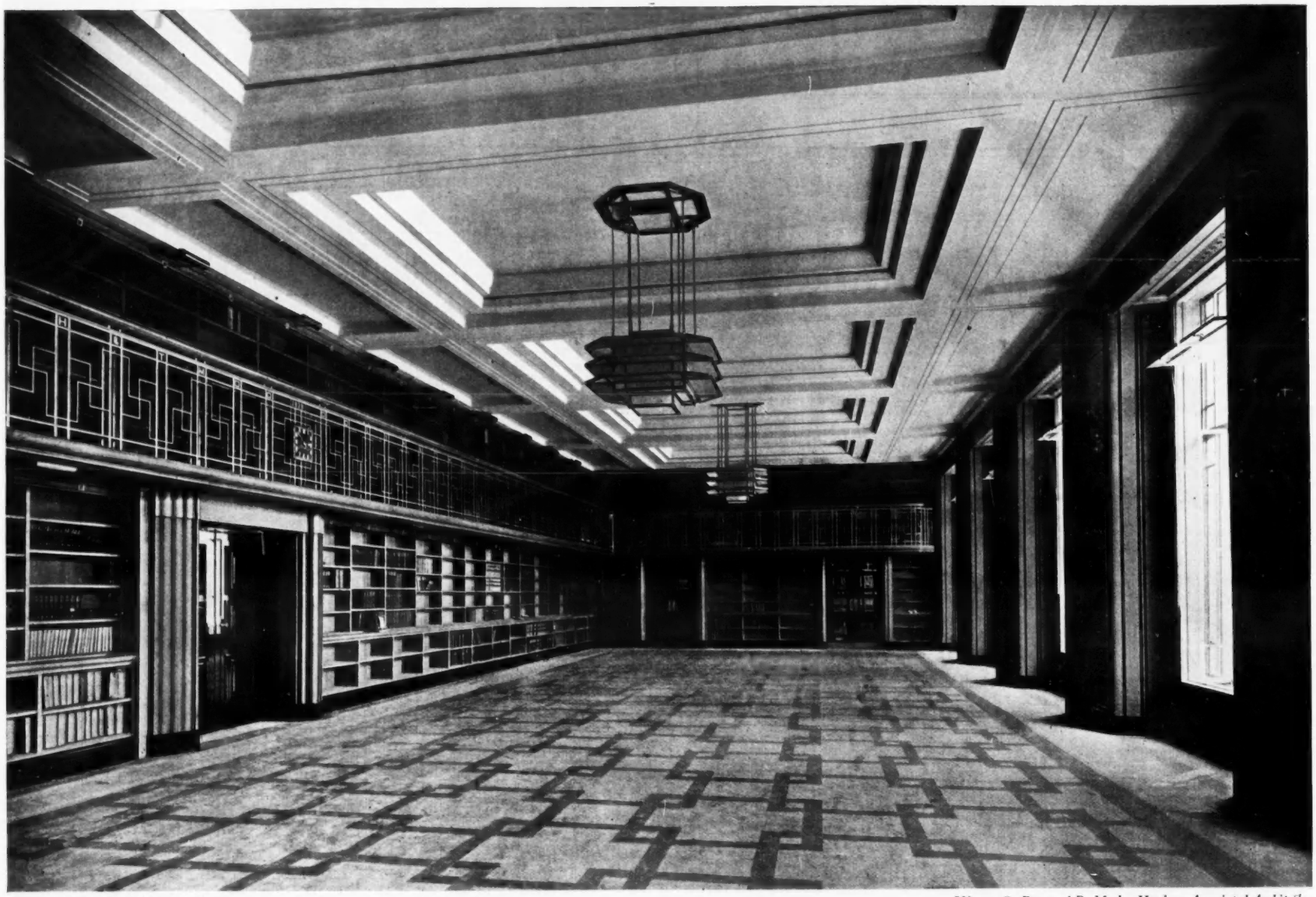
London School of Tropical Medicine.]

The ground-floor plan. The building has been planned to give immediate access from the main entrance to the administration remainder of the plan is laid out in the form of a letter H with secondary



[*Verner O. Rees and P. Morley Horder : Associated Architects.*

department and the lecture hall on the ground floor, and to the library and museums on the first, second, and third floors. The entrances from Gower and Malet Streets, and staircases in the centre of the H.



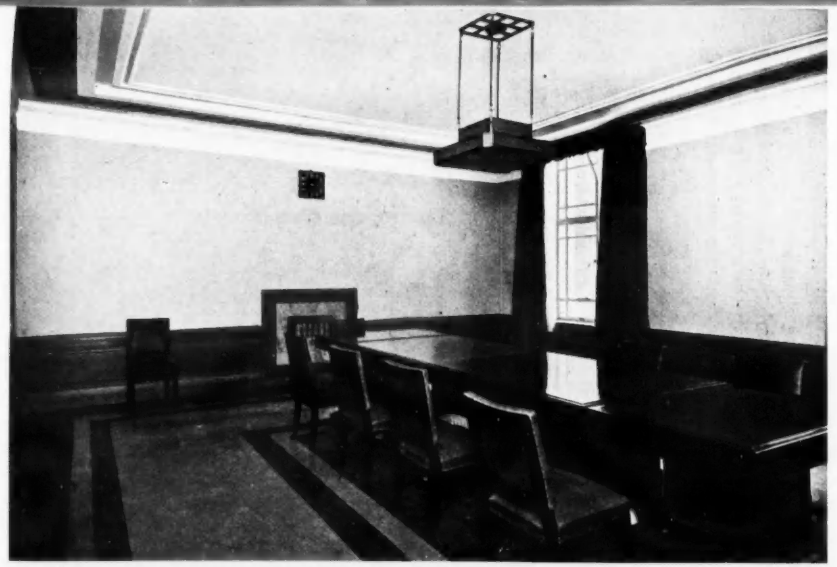
London School of Tropical Medicine.] [*Verner O. Rees and P. Morley Horder : Associated Architects.*

The library, on the first floor, is entered from the staircase hall by the doors shown on the left. On the right are windows overlooking Keppel Street, and at the end of the photograph the doors leading to the offices of the secretary, assistant secretary, and director of the publications department.

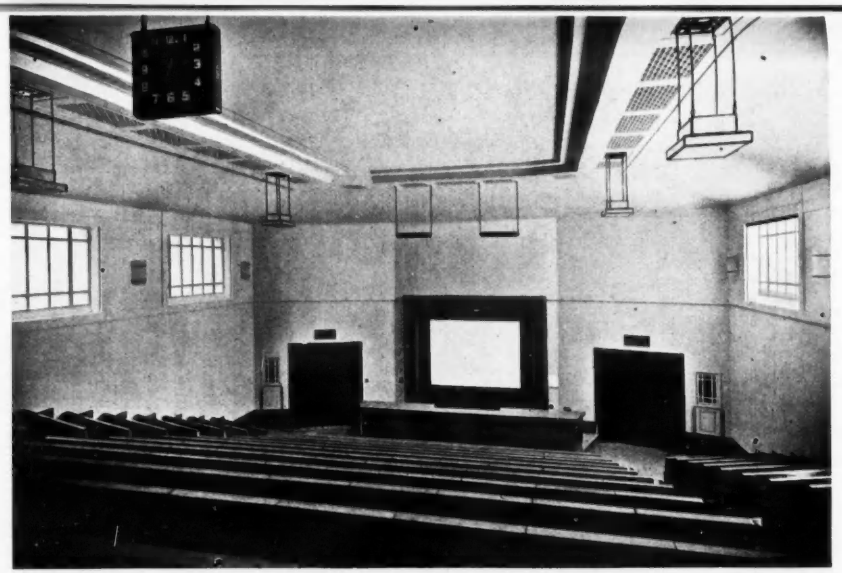




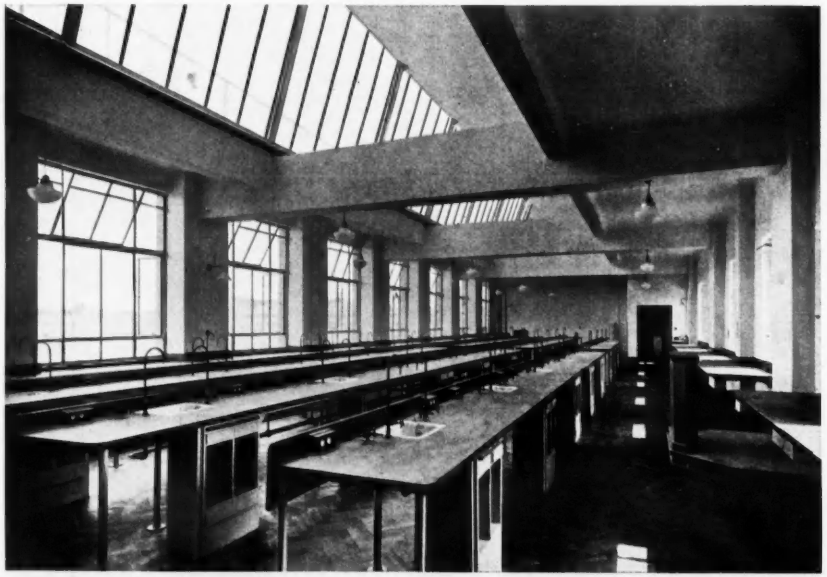
The library, on the first floor, is entered from the staircase hall by the doors shown on the left. On the right are windows overlooking Keppel Street, and at the end of the photograph the doors leading to the offices of the secretary, assistant secretary, and director of the publications department.



The board room, like every other part of the building, has received the personal attention of the architects. Even the clocks and electric light fittings are made from their designs.



In the lecture hall the cinema apparatus has been so devised that slow-motion pictures may be shown, or the film stopped at any event or action needing special emphasis.



London School of Tropical Medicine.]

This view of the medical zoological laboratory is typical of the fitments and the arrangements of the rooms for research work. In this instance ample daylight is obtained from top lights and windows.



[Verner O. Rees and P. Morley Horder : Associated Architects.

A corner of the upper museum. The "wells" are used to help light the museum beneath. The board room, lecture hall, library and museums are easily accessible from the main entrance.



OXFORD *versus* CAMBRIDGE

An Architectural Match

BY W. S. PURCHON

Stimulated by the University match, the author selects "elevens" to represent the two universities, considered architecturally, and plays them off, one against another, with provocative results. These two illustrations are of Oxford churches: on the left, the interior of Christ Church Cathedral; on the right, the steeple of St. Mary the Virgin. (Photos: G.W.R.)



WHEN the 'Varsity cricket match was imminent many voices were raised acclaiming the merits of one or other of these institutions. Two small boys were said to have been interviewed and asked to give some reasons for the faith that was in them. To my astonishment one of them (whether he was backing Oxford or Cambridge I cannot remember), stated that one of his reasons for supporting his particular favourite was the beauty of its buildings! This sounds almost too good to be true, and while I am prepared to believe it, probably there are many sceptics who would refuse to follow my example.

Be that as it may, if we could imagine such a remarkable state of things becoming normal and the man in the street considering the relative merits of the respective groups of buildings before deciding whether to shout "Oxford" or "Cambridge," which would you and I support? I assume, of course, that the degrees of which we are so proud were awarded to us at Liverpool, Manchester, London, Sheffield, or any other of the newer seats of learning, so that our views are not unduly biased.

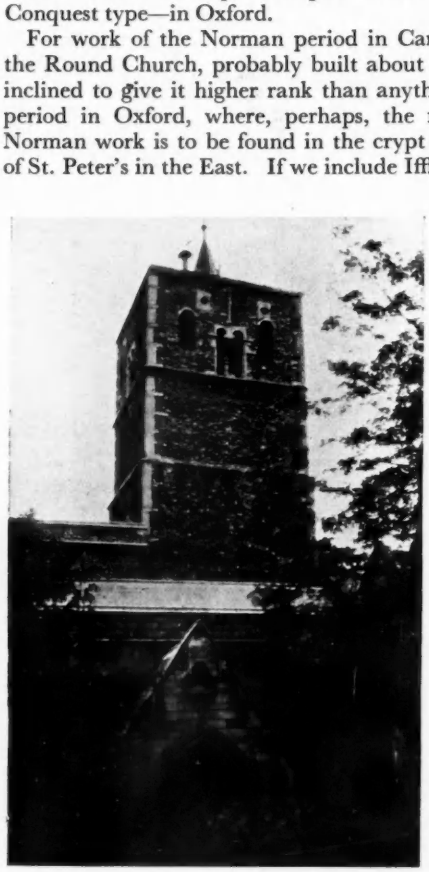
On first thoughts I vote for Cambridge, but it may be that this rapid judgment is too much influenced by the recollection that the buildings in that group of colleges seemed to me, after experimenting at both universities, more suitable and convenient for the purpose of the maker of measured drawings than did those at Oxford.

Perhaps each of us could settle the matter for himself or herself by the process of selecting a team of buildings to represent each university and then playing them off against each other in pairs. Just now the process of team selection is a very popular pastime, and just as in cricket many divergent views are expressed, so it may be that if here and now I put forward two teams of buildings, one from each university, the correspondence columns of this paper will be filled with angry comments. The thoughts of such a result do not, however, disturb me in the least; so here goes.

In building up each team there must, of course, be some system of selection, and the one I am adopting, though I am prepared to admit there may be better methods, is that of putting up for one university what I think its most representative building of each period, and then seeing if the other university is likely to bowl it out.

Let us start with pre-Norman buildings, and here I would claim that the church of St. Benedicts is the best that Cambridge can show, and I venture to suggest that it beats the remains of pre-Conquest work—or work of pre-Conquest type—in Oxford.

For work of the Norman period in Cambridge I select the Round Church, probably built about 1130, and I am inclined to give it higher rank than anything of the same period in Oxford, where, perhaps, the most interesting Norman work is to be found in the crypt and other parts of St. Peter's in the East. If we include Iffley with Oxford,



The Church of St. Benedicts, "the best that Cambridge can show" in the way of pre-Norman buildings.



Left : The Round Church, Cambridge, probably built about 1130.

Right : The Radcliffe Library, Oxford. (*Photo : G.W.R.*)



and admit the nomination of Iffley Church, this decision would probably be reversed, but I feel that that nomination cannot be allowed. Iffley, however, may help to score for Oxford under another heading.

It will be realized that the above consideration of Norman work has been based on the assumption that transitional examples would be judged separately, and here I consider the work of that period at Christ Church Cathedral, Oxford, is ahead of anything that can be produced at Cambridge.

With regard to Early English Gothic I am sorry that these two universities cannot put up a better fight, but I am inclined to award the point to Oxford for the thirteenth-century work in the church of St. Giles. Perhaps the Chapter House of the Cathedral would be put in the team by some, but in either case I think the victory would go to Oxford over the claims of the thirteenth-century work at Jesus, St. Clements, or the church of St. Andrew the Less at Cambridge.

For the Decorated Period in Cambridge I would select Little St. Mary's Church, but for Oxford the choice is more difficult to make. Here we must consider the rival claims of the early decorated work at Merton Chapel, and the steeple of St. Mary the Virgin. I select the latter and award it the victory over the work of the same period in Cambridge.

There will be a stiff fight over the Perpendicular period, I feel sure. There are many claims for a place in each side, but I choose King's College Chapel for Cambridge and the Tower of Magdalen for Oxford, and not without long and careful deliberation do I award the point to the former.

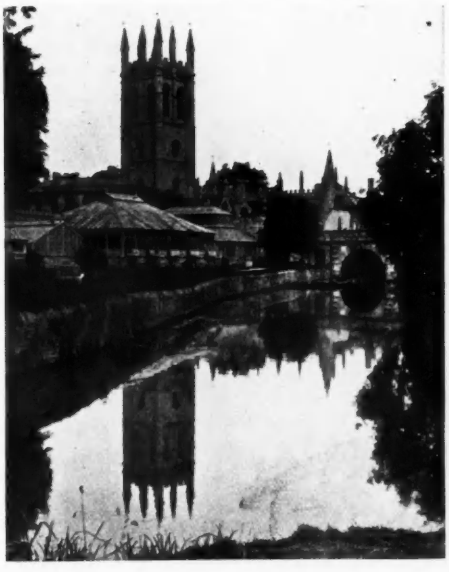
In both of these universities there are many examples of the architecture of the Early Renaissance, and in each case it is very difficult to select the most representative, but I think the examples in Oxford are superior to those in Cambridge, and of these Oxford examples I would mention the garden front of St. John's in support of this judgment. For this purpose I have counted the Early Renaissance as extending from the close of the Gothic period up to the time when Wren comes on the scene.

During the period in which English architecture was dominated by Sir Christopher, a considerable amount of work was carried out in both universities. In Oxford it is difficult to make a selection of the work by Wren, attributed to him or carried out under his influence in that university. I would choose Trinity College Chapel, mainly for the appeal of its interior. In Cambridge, Wren's library for Trinity College must be selected and must be awarded the point over the Oxford examples.

It was probably over the work of the Renaissance period subsequent to Wren that my hasty first thoughts went astray. The Senate House and the Fellows' building at King's, by Gibbs, and Wright's work at the University



Left : The Chapel of King's College, Cambridge. (*Photo: L.N.E.R.*)



Right : The Tower of Magdalen, Oxford. (*Photo : G.W.R.*)



Left : The Clarendon building, Oxford.



Right : Trinity College, Cambridge, from the river.

Library at Cambridge are excellent buildings, and their peculiar suitability for the purpose of sketching and measuring brings them into prominence in one's mind, but the work by Gibbs, Vanbrugh, and Hawksmoor at Oxford must, I think, be placed ahead of the examples at Cambridge, and I would select the Radcliffe Library at Oxford as the finest work of the series.

If we class together works of Greek Revival (and Neo-Grec types) and Gothic Revival, I think, of the former, the best that Cambridge can show is the work at Downing, while Oxford leads here, in my opinion, with Cockerell's Taylor and Randolph Institute. The Gothic Revival is, for me at least, an exceedingly difficult period in a task like the one before us. But, for genuine understanding of medieval work and sympathetic treatment, I would put Messrs. Bodley and Garner's work at Magdalen College, Oxford, ahead of any other work of the type in either Oxford or Cambridge.

From recent work in these universities it is also most difficult to make a selection. Basil Champney's work at Merton, Oxford, appeals to me very strongly, but the new buildings at Clare, Cambridge, by Sir Giles Gilbert Scott, are even finer, and I feel that Cambridge must be given the point.

It may be felt, and I think quite rightly, that there are important factors other than the separate buildings, and these may perhaps be included as "extras," though I tremble when I think of the wrath of Clough Williams-Ellis should he hear of the use of this term in connection with one at least of its items.

I feel, however, that Cambridge deserves an extra point for the magnificent entrances to its colleges and another for its general amenities. This latter consideration involves the very debatable question of the superiority of the Cambridge "Backs" to the Oxford College Gardens, but I must stick to my guns and give Cambridge the point. It will be necessary, however, for this centre to get busy with a civic society, or it may fall behind its rival in this respect.

There is, I think, one further "extra" to be awarded for the interest and charm of the neighbouring places, which can easily be reached from each of the universities, and I think this point must be given to Oxford for such delights as those of Iffley, Blenheim, Burford, and Abingdon.

The final score may now be given, resulting, according to my figures, in a very narrow win for Oxford; but it is anticipated that this will not be allowed to pass without a spirited protest from the supporters of Cambridge.

	Cambridge	Oxford
Pre-Norman	1	0
Norman	1	0
Transitional	0	1
Early English	0	1
Decorated	0	1
Perpendicular	1	0
Early Renaissance	0	1
Wren Period	1	0
Post-Wren Renaissance	0	1
Greek and Gothic Revivals, etc.	0	2
Recent Work	1	0
"Extras"	2	1
Total Scores	7	8



Clare College, Cambridge : Sir Giles Gilbert Scott's new building.



The main entrance in the centre of the easterly front, approached from Regent Road.

Two New Buildings in Leicester: i

WYGGESTON GRAMMAR SCHOOL FOR GIRLS

DESIGNED BY SYMINGTON AND PRINCE

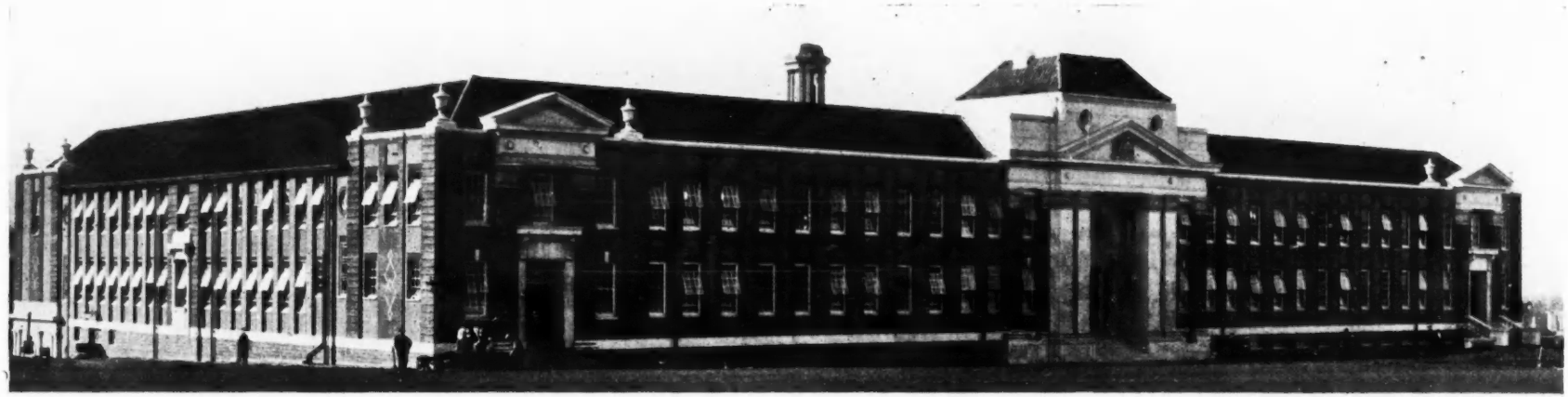
THIS building, in brick, with principal features in artificial stone, roofed with pantiles, and fitted with metal casements, represents the premier girls' school of the City of Leicester. It occupies a particularly fine site and has become a prominent landmark. It is a high-grade secondary school, accommodating 700 pupils, and, for a



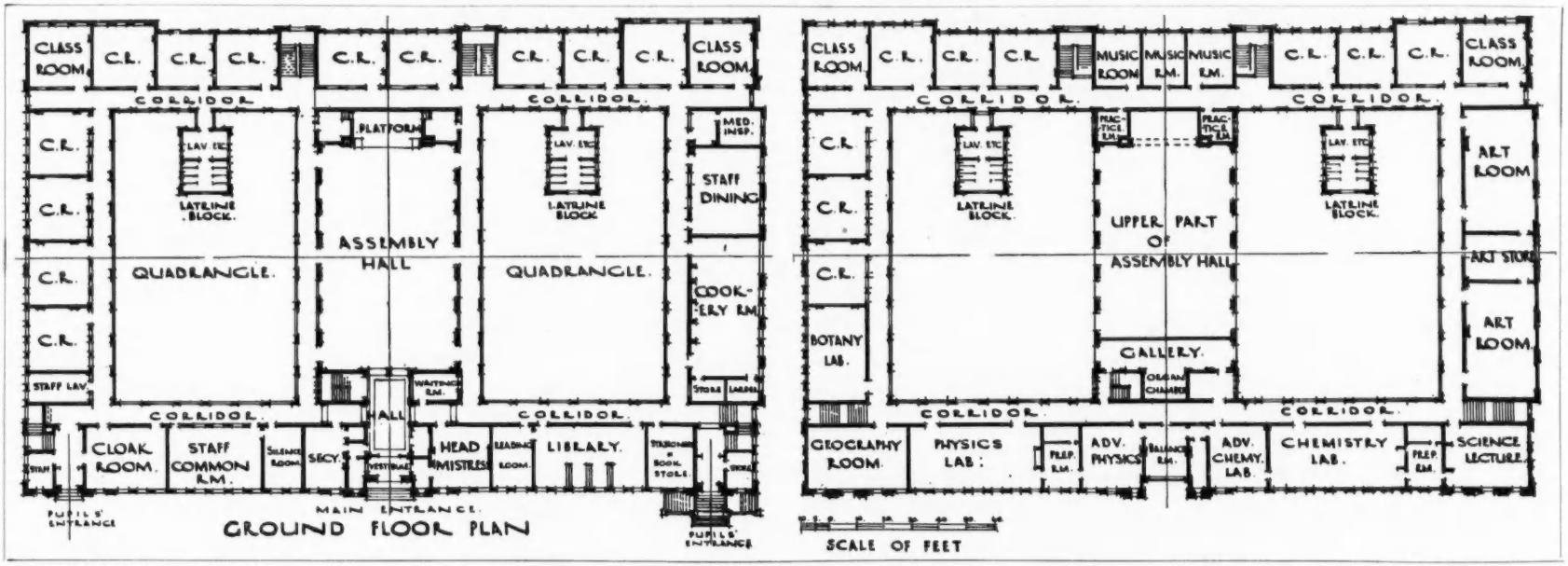
This photograph, showing portions of the west front and south side, should be read with that on the following page.



In one of the two quadrangles, looking towards the assembly hall, which is surmounted by a turret.



A general view, showing the whole of the main, or easterly front, and of the southerly side. It conveys indications of the magnitude of the building, which accommodates 700 pupils, covers a rectangular area of about 180 ft. by 270 ft., and includes two quadrangles, as shown in the plans below.



Wyggeston Girls' School.] [*By Symington and Prince.*

The architects' ground-floor plan, illustrating the planning around two quadrangles. Advantage is taken of the sloping site to provide, in a partial lower ground floor, gymnasiums and a dining hall.

The first-floor plan. The assembly hall is two floors in height; features of note are the provision of lavatory accommodation in two special blocks, projecting into a quadrangle on each floor; and of laboratory suites.

girls' school, is particularly well equipped, especially with regard to its laboratory provision.

The arrangement of the accommodation around two quadrangles, with the assembly hall between, is economical, and also, where there are sufficient departments other than classrooms, allows of every department and classroom being located with a suitable aspect.

The main school is arranged on two floors, with a lower ground floor on the south (taking advantage of the sloping site). This lower ground floor contains the dining hall and kitchens, etc., and also two gymnasiums for senior and junior girls, together with cloakroom, baths, and lavatory accommodation.

The hall has a large platform, equipped with proscenium lighting and footlights; and two retiring-rooms at one end, and a gallery and a fine organ (the gift of Sir Jonathan North, J.P.) at the other. Beneath the hall are the boiler-house, pump- and switch-rooms, and cycle stores, etc.

On the ground floor are fourteen classrooms, arranged for classes of thirty, twenty-five, and twenty pupils, those on the south being for the junior school. The staff dining-room is also used as a junior hall. The housecraft-room (part of which is equipped for cookery and part as a laundry) and the medical inspection rooms are on the northerly side, while on the easterly front are the staff rooms and also a fine library. The cost of the oak panelling and equipment of this room was undertaken by the Old Girls' Association.

On the first floor there are eleven classrooms, music-rooms, remedial exercise room, two art rooms, and the chemistry, physics, and the botany and biology laboratory suites.

Lavatories and w.c.s are provided on each floor in blocks which project into the quadrangles and are connected to the corridors by ventilated lobbies. This is more convenient and time-saving than the arrangement of all the lavatories and w.c.s on the ground floor, as is more frequently done.



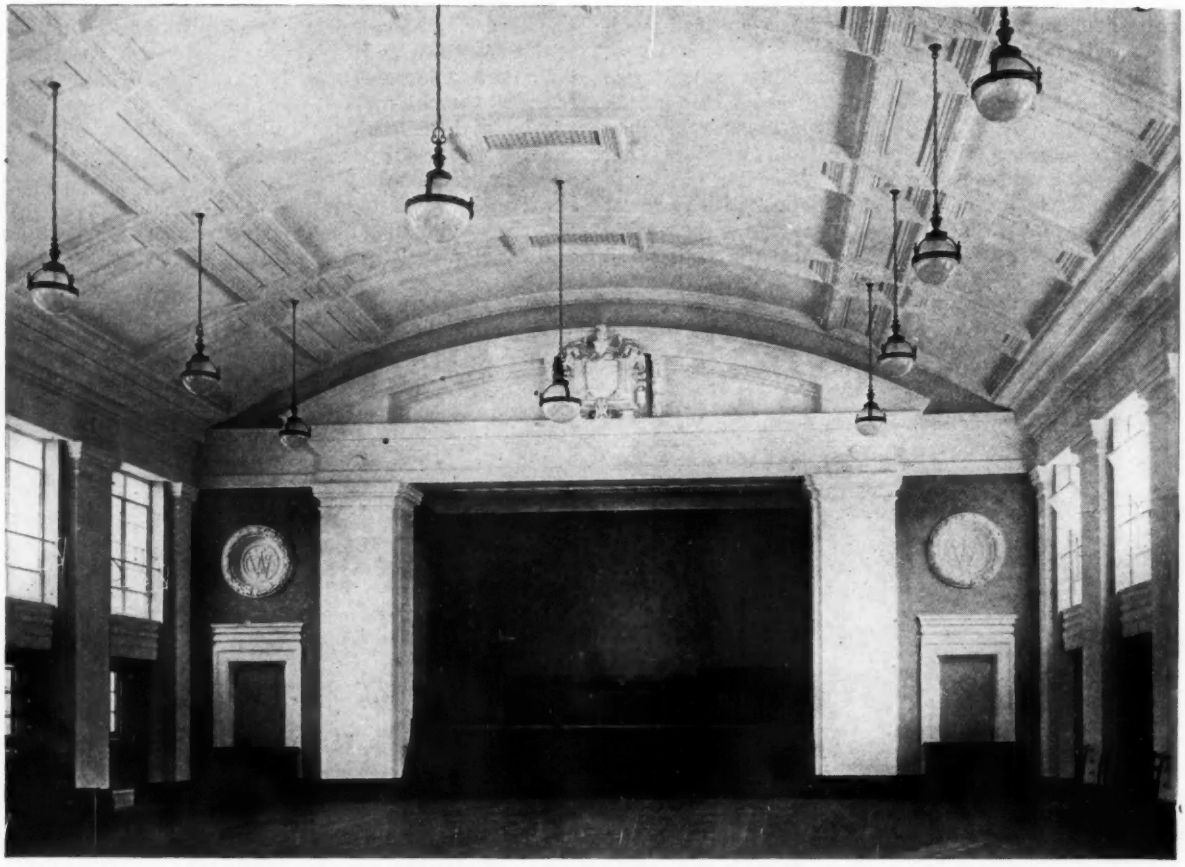
Wyggeston Girls' School.] [*By Symington and Prince.*

In the entrance hall, on ground-floor level, looking into the assembly hall. On the extreme left are stairs leading to the upper floor. The semicircular arches give access to covered corridors surrounding the quadrangles, and thus connecting with the classrooms.

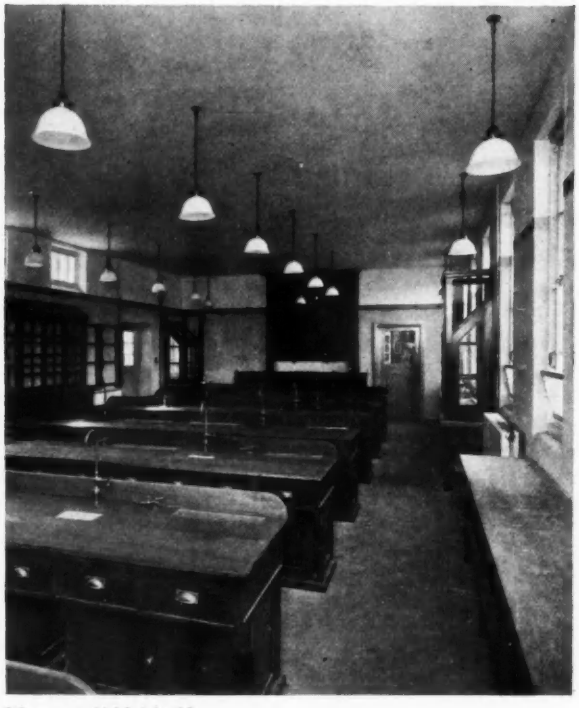
The whole of the rooms are well placed and proportioned, and adequate natural cross ventilation and light is obtained in each. The whole of the external windows are of the steel-balanced sash type, expressly designed for school use, fitted in wood frames and with a special hopper baffle at the bottom to prevent direct currents blowing on the heads of the pupils.

The interior decoration is of a bright character, particularly in the junior departments. The fibrous plaster ceiling, etc., in the main hall was modelled by the late Mr. Geo. P. Bankart.

Along the whole of the south front runs a broad, flagged terrace, over 30 ft. wide, which is a great asset in fine weather for open-air drills, etc. The cost of the building was £80,600, or 1s. 3d. per foot cube.



The platform and proscenium in the assembly hall; provision is made for special lighting for stage and other performances. The ceiling is in fibrous plaster, enriched with mouldings. At the opposite end is a gallery and organ.



Wyggeston Girls' School.]

A corner in one of the laboratories, with which the school is well equipped, having suites devoted to physics, chemistry, botany, etc.



[*By Symington and Prince.*

A corner in the library, which is situated on the main ground floor; the room is oak panelled and equipped with specially designed book presses.



The main façade, showing the two projecting wings on the front of the building. That on the left contains general and oil stores and lavatory accommodation ; that on the right, an office and changing and drying rooms.

Two New Buildings in Leicester: ii

CITY OF LEICESTER OMNIBUS GARAGE

DESIGNED BY W. H. & H. G. RILEY

IN the construction of the garage, erected on a site in Abbey Park Road, Leicester, and illustrated on this and the following two pages, it was essential that the floor space should be as free as possible from columns so as to provide the maximum amount of accommodation for the omnibuses. The construction of the roof is therefore of particular interest.

Steel trusses stretch right across the roof in one single span, covering a floor 300 ft. long and 100 ft. wide. The height from the floor to tie-beam trusses is 18 ft. Corrugated metal and patent glazing have been used in the construction of the roof. The building is of brick, with stone dressings and steel-framed windows. On its main front are two projecting wings. That on the left contains the general and oil stores and lavatory accommodation; the floors of the store are of concrete. The other wing has an office and drying and changing rooms for the use of the employees. Underneath these rooms is the heating-chamber.

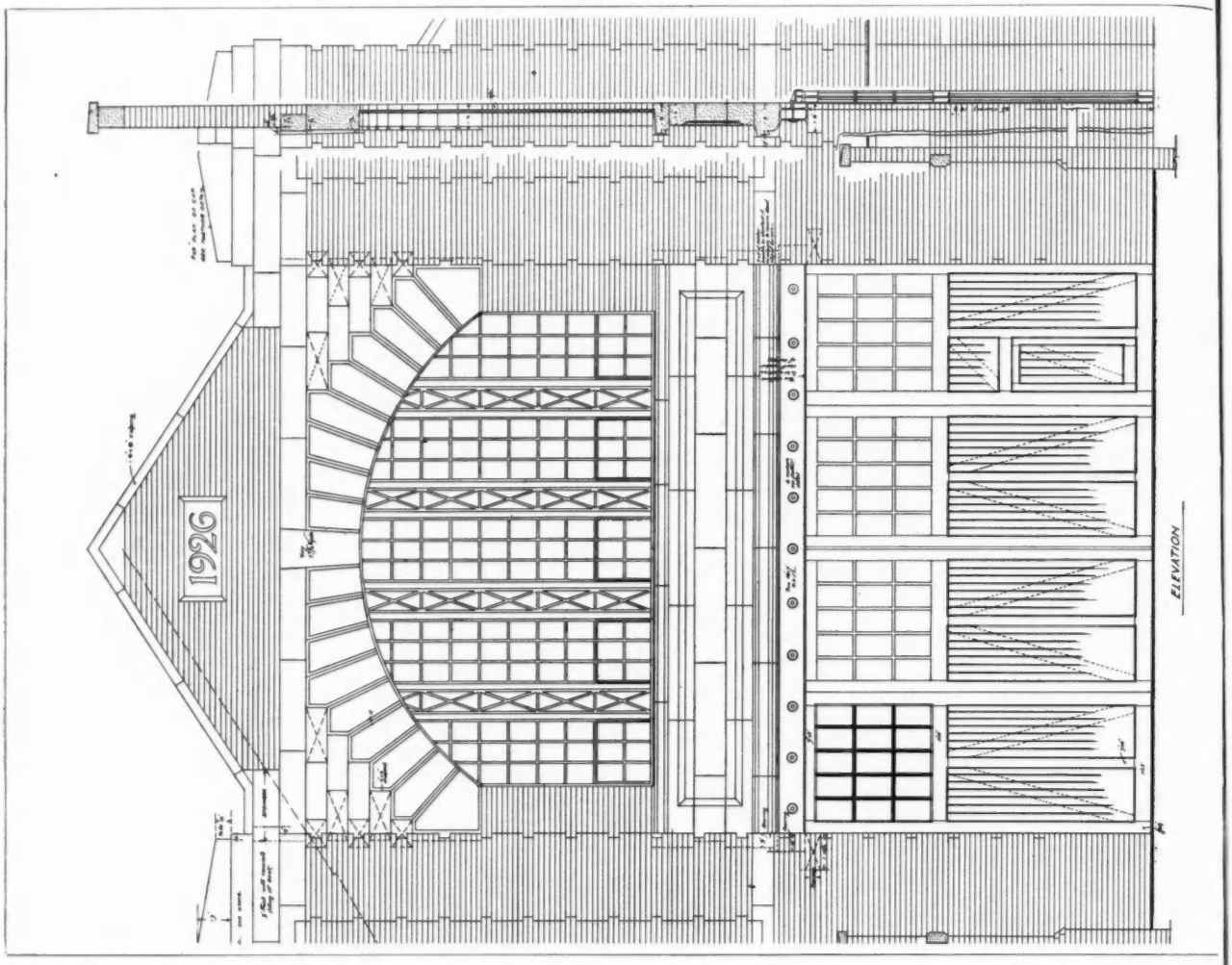
A fire exit is situated in the far corner of the garage. Through this access is obtained to ground upon which future extensions may be made.

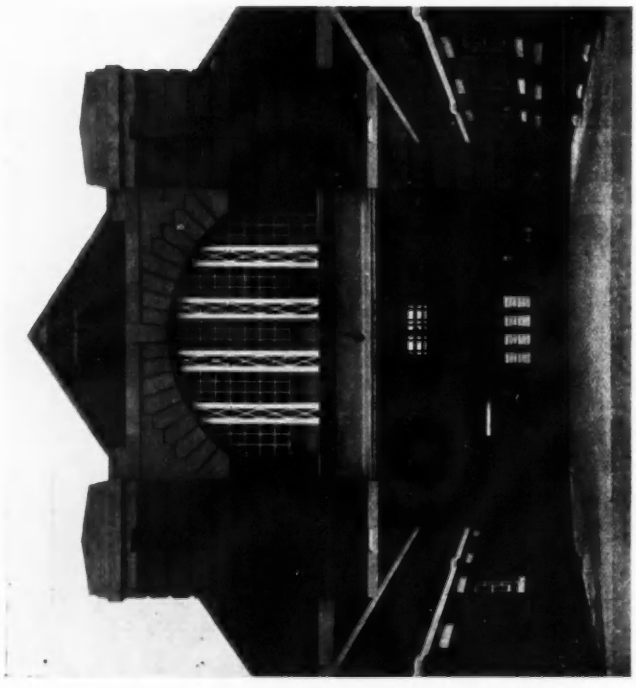
Running alongside the garage is a top-lit repairs workshop with a flat roof of asphalt. Artificial light is provided from large steel lanterns of special design.

The building will be officially opened tomorrow by Alderman G. Banton, J.P., chairman of the Tramway Committee.

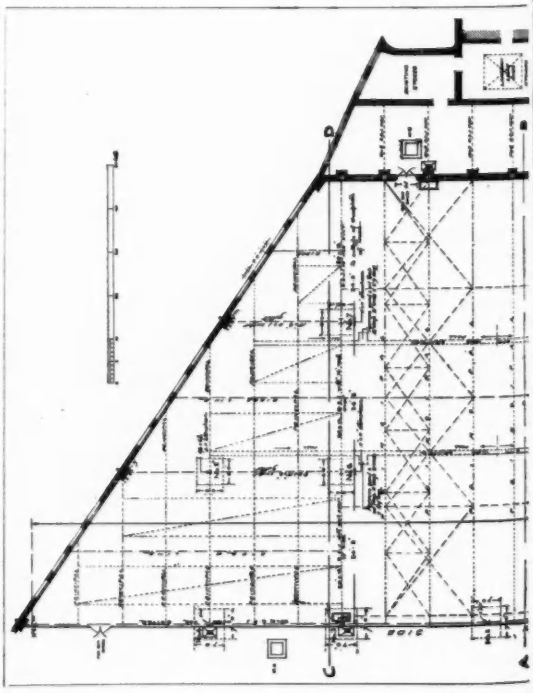


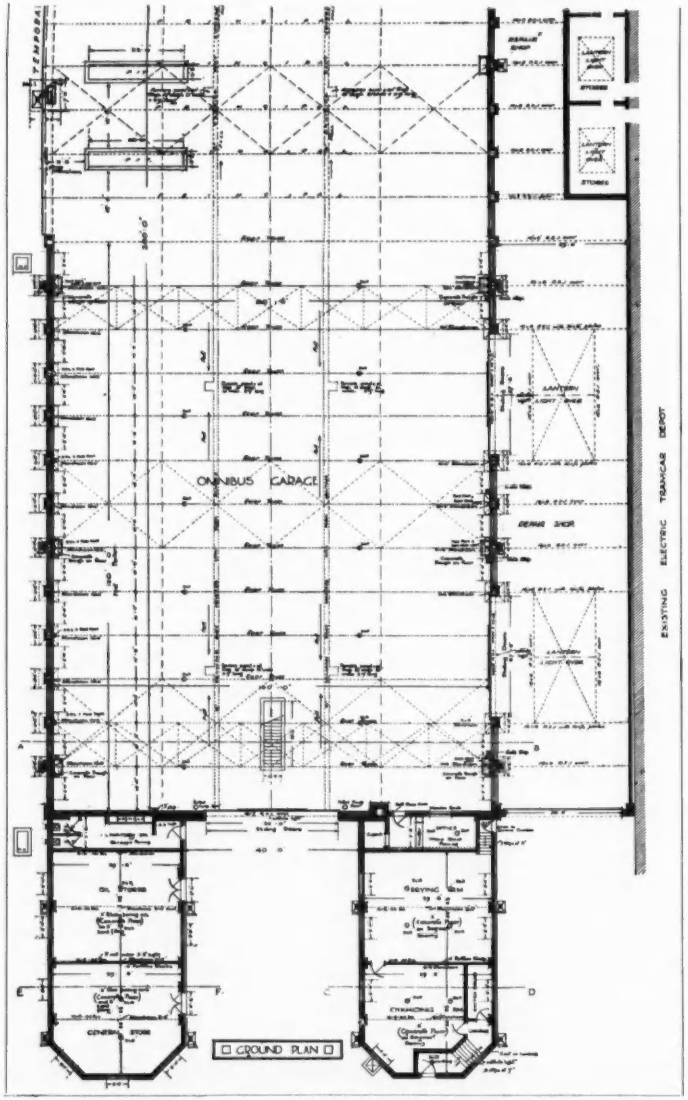
The architects' drawing of the main elevation. The building is of brick, with stone dressings and steel-framed windows. Alongside the garage is a repairs workshop, 29½ ft. wide, with access through sliding doors.



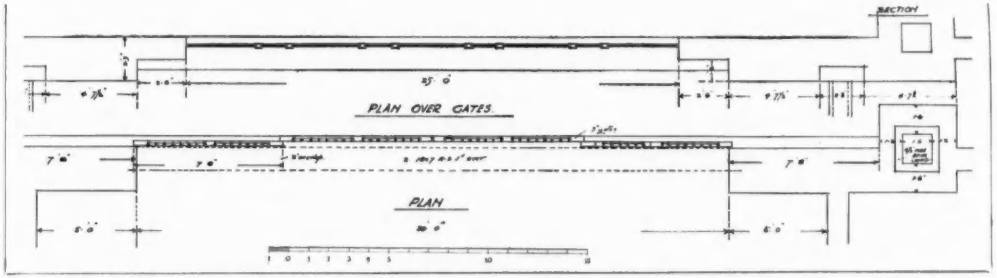


The main entrance. The floor is 300 ft. long and 100 ft. wide; it is almost entirely free from columns. Steel trusses stretch across the roof in one single span.





Leicester Bus Garage.]

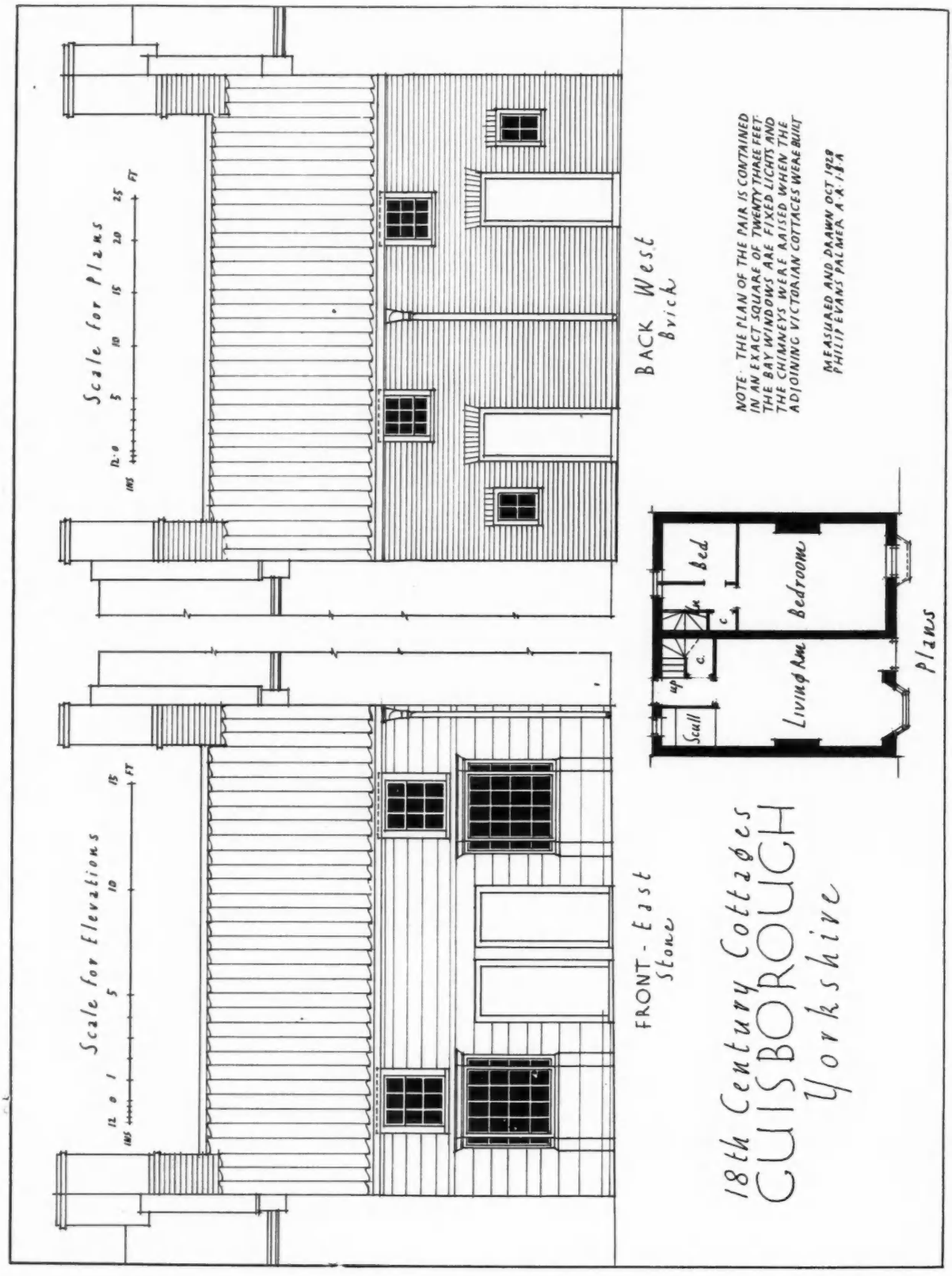


Detail drawing and plans of entrance way. The width of these doors is 30 ft. The semicircular-headed window above is of metal, with hopper openings.



[*By W. H. and H. G. Riley.*

Ground-floor plan (left) and interior view, looking towards the entrance (right). Along the centre of the floor space, which measures approximately 100 ft. × 300 ft., are two draining ducts covered with iron gratings and fitted with sand and oil traps. Windows in the side walls and roof-glazing admit a maximum amount of light. The picture gives a good idea of the unusual span of the roof trusses.


18th Century Cottages
GUISBOROUGH
Yorkshire
FRONT - East
Stone
BACK West
Brick
Scale for Elevations
Scale for Plans
NOTE - THE PLAN OF THE PAIR IS CONTAINED IN AN EXACT SQUARE OF TWENTY THREE FEET THE BAY WINDOWS ARE FIXED LIGHTS AND THE CHIMNEYS WERE RAISED WHEN THE ADJOINING VICTORIAN COTTAGES WERE BUILT
MEASURED AND DRAWN OCT 1928
PHILIP EVANS PALMER A.R.I.B.A
Bed
Bedroom
Living Rm.
Scull
Plans



ENGLISH PRECEDENT No. 73

SHELL PORCH AT SPRINGHILL HOUSE, NAILSWORTH, GLOUCESTERSHIRE.

This example of a shell porch is from the stone district of the South Cotswolds. It forms the entrance to the addition, one room in depth, built in 1698, to an earlier Tudor house. The stonework of the addition is of fine design and craftsmanship. Internally the house is finished with deal and oak panelling and a richly-carved staircase.—[THOMAS FALCONER.]

ARCHITECTS' FEES

When Should Accounts be Rendered?

In our two previous issues views of some prominent architects with regard to the best practice to adopt in sending in accounts for fees were published. The correspondence arose out of the remark by Karshish on June 19, in "The Honeywood File," that when dealing with a private person the architect should wait until he is invited to send in his account. Following are further views and a reply by Karshish himself, who is now Convalescent.

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Do not think me a "carping critic," for I look forward to, and much enjoy, the writings of Karshish (may he soon be fit again!) but surely for a job of this size friend Spinlove would have been well advised to have stipulated for the engagement of a clerk of works, to oversee Bloggs and his merry men. This would be the practical way to get the job really well built, but, of course, by so doing, the delightful "yarn" would be robbed of many of its practical lessons and humour. Please carry on again soon.

T. FRANK HAWKES

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I have been glad to see a general repudiation of Karshish's view as to fees. He is, of course, historically correct. Sir John Soane, for instance, "never rendered an account until it was asked for, or unless he heard that another architect was being employed," but this was only in his work for *private clients*. In the case of the Bank the account was rendered regularly, as I have shown elsewhere. I have always regretted that the R.I.B.A. does not definitely break with the older plan of asking for half fees. The two-thirds is a modern compromise. The late Ingress Bell gave me a valuable hint when he told me that Sir Charles Barry always sent in his statement with each certificate. The result of Soane's practice was that, when he retired, he was trying to collect fees of twenty years' standing. I have never known of any trouble arising on what should be the correct practice, and it leaves little or nothing to quarrel about at the end.

ARTHUR BOLTON

Karshish replies.

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Surely no writer was ever fustigated by his critics more tenderly than I! Their attack is directed so wide of the seat of my self-respect that I perceive it merely as pats on the back for my encouragement. The appreciation, avowed and implied, of your correspondents has, in fact, given me great pleasure, more particularly as I had no right to expect that so adventurous and provocative an affair as this Honeywood business could escape doing violence to the credulity of some readers and the judgment of others. That this does not appear to have happened is partly due, no doubt, to author's luck; and partly, because what is so intimately and minutely true for myself, must be true, in the main, for others.

It seems to have been overlooked that my comment on Spinlove's application for fees involved no approval of the state of affairs which made that comment desirable. A question of fact, not one of opinion, is at issue; and I have to say that after reading attentively the various letters you have printed, and reviewing the offending passage, I have no wish to alter one word. In my opinion it exactly presents the facts as they exist and gives them a true colour. It must be remembered that my purpose is not to entertain the experienced practitioner, but to instruct the uninitiated; and if I signalized my approval of Spinlove's overture by withholding comment I should misdirect those whose instinctive right-thinking ought to be enforced. I am speaking of a thing I perfectly know and understand; and if a hundred or a thousand or two thousand tell me I am wrong I only know what I know already—namely, that there are many thousands who know I am right and that the fact that inexperience or insensitiveness keeps others ignorant has no bearing whatever on the matter.

I hope the above passage does not sound arrogant; I wish only to be emphatic and to assure those who may be looking to me for guidance that I take my responsibilities seriously. It is to be remarked that all your correspondents, except, I think, one, even when they discredit my presentment of the facts, enlarge upon the difficulties which face a young architect in the predicament in which our friend Spinlove is depicted. It is impossible for me to substantiate my statement by arguments, but I may in some degree display analogous facts to which, I think, no one will demur.

Among gentlemen—that is, among those who have the instinctive delicacy of sympathy which prevents them from wounding anyone's feelings unless they so intend—an air of casualness in money transactions is always observed. In dealings with a private client the architect should be also casual and not place himself in an inferior position by exactions. The essential of any service—that thing in which the real value of any service subsists—never has been and never can be paid for in money; the thing that the artist (in all fields), the craftsman, the teacher, the professional man, the scientific investigator strives for remains unremunerated; the exuberance, enthusiasm, devotion he gives to his work has its own ample reward, but that reward is not in cash. A gentleman is instinctively aware of this, and it is out of sympathy with what he understands to be the ambition of the artist and the professional man that he keeps the money transaction in the background. From the same instinctive delicacy of feeling he would, at such an appropriate opportunity as would not let a small man be kept out of pocket nor touch the dignity of a big one by suggesting that he was in need of dibs, ask his architect to let him have a note of his fees.

An architect who removes himself from this acknowledgment of the status of professional man to that of potato merchant by sending in his bill before he is asked to do so or even before he can be sure he will not be asked, does himself no good and his profession harm. There is so much to be said on this subject that it is best to say little—but can anyone who has paid a consulting physician his fee, or seen the operation performed, question the sensitiveness that subsists in the monetary recognition of professional services? It is not alone the patient who is embarrassed; the great man himself will go and adjust the blind or look for something on the mantelpiece while the cash is being got together.

Mr. Stanley Hamp hits to the root of the matter when he says: "It becomes so much a personal matter in dealing with a private client that it is almost impossible to lay down any hard and fast rule." It is this that makes the hare started in your columns so well worth running. The Institute ought to replace its recapitulation of alternative customs by a definite recommendation which would constitute a rule which every member, on behalf of all, should be called upon to observe. If one recognized custom were established all difficulties, and most delicacies, would disappear.

KARSHISH

SHADOW PROJECTION

A Holiday Course for Architectural Students: vii

BY JOHN M. HOLMES

This week consideration is begun of the shade and shadows of various forms invented solely to illustrate the application of methods explained in previous diagrams. The student is advised to draw out the shadows of forms similar to those in this section, in the order of progress indicated. Owing to the scale of the diagrams, it is possible to indicate only typical points by letters.

Diagrams 14-15: Shade and Shadows of Prism Forms; and of Cone and Cylinder Forms.

DIAGRAM 14

Elevation Shade and Shadows

Reference is first made to the plan to decide which parts of the elevation will be illuminated. Any surface which is not reached by lines drawn at 45 deg. in plan will not receive direct light. AB—CD in the upper part of the elevation thus form a dividing line, and edges such as EF and FG of the small rectangular projection are dividing lines and will cast a shadow on the elevation. Shadows on the elevation are produced by direct projection in plan and elevation, the plan line of the surface on which the shadow is thrown becoming an *XY* line for that particular part of the shadow. For convenience of explanation a plan section of the part of the form at Z-Z is given. The surfaces on which the shadows fall are indicated by numbers 1 to 9 in the two plans, and by the same figures on the corresponding elevation surfaces. For the shadow of the circular edge HIJ see diagram P (instalment i). For the shadow of edges EF and FG see diagram T (instalment ii). The shadow in the the hollow 5 is that of the lines KL, KM projected from plan through the line 5. Reference to the plan will show that this shadow is overlapped in the lower part by the shadow of the projecting form to the left. The vertical edge OP in the lower part of the form has its shadow partly on surface 8 and partly on surface 9, and is accordingly projected through plan lines 8 and 9.

Plan Shadows

Reference is now made to the elevation to determine the plan shadows. A projection at 45 deg. through AQB in plan and elevation shows that the point Q will have its shadow on the plan surface at R. In the same way the shadow of the part SD of CD is found on the plan. Every horizontal surface in the elevation on which a shadow falls becomes an *XY* line for projection of points to the plan.

Background and Foreground Shadows

The shadow outline on background and foreground will be composed of the projections of points from the dividing line of the form to the background through the *XY* line. The shadow outline is, however, distorted in so much that a portion of the dividing line has already been projected by the light on to the projecting horizontal surfaces of the form. Thus, AS—QS is the only part of the edge AQB which is projected by the light on to the background; the remaining part of AB, viz. QB, has already been projected in plan. If it be remembered that any part of the dividing line already projected as shadow on the plan or elevation of the form cannot be also projected on the background or foreground, the working of the cast shadow is a matter of simple projection of the remaining parts of the dividing line. The salient points T, V, W, X, and AE are indicated in the elevation and have their shadows at TS, VS, WS, XS, and AES.

DIAGRAM 15

Elevation Shade and Shadows

The upper part of the form consists of a series of cones and cylinders. There will be no shade on the uppermost cone A because its inclined contour is at less than 45 deg. with the base. The dividing lines on the truncated cone B and on all other conical forms in the diagram are obtained as in diagram 5 (instalment ii), and the dividing lines on the various cylinders by drawing a line tangent to their plan circles at 45 deg. and projecting to elevation. The curved shadow line DS—ES on the uppermost cylindrical form in elevation is obtained by projecting selected points in the plan of DE through the appropriate plan circle; thus, from DP in plan the point DPS is found and projected to give DS in elevation. The shadow of the edges of the square and hexagonal forms are projected in the same way. Point F on the elevation of the square form, with its plan at FP, thus produces FS, and point G on the elevation of the hexagonal form produces shadow point GS. For the shadow in the niche see diagram 3 or diagram 13. The shadows of the portion of hollow cylinder on the left are obtained by direct projection of points in the line HJ in elevation into the hollow surface of the form, and points in KL on to the cylindrical surface of the large form, and into the lower part of the niche. The shadow on the detached cone on the right is obtained from the plan shadow by slicing (see below).

Plan Shades and Shadows

The dividing lines on the plan of the truncated cones marked B and M in the elevation are obtained as in diagram 5. The shadow P—OS of the dividing line UP on cylinder N in elevation is obtained by one slice circle QR in elevation on the upper part of the cone M. This shadow edge P—OS is hidden in plan by the overhanging cone B. For slicing see diagram 2.

Background and Foreground Shadows

The shadows on background and foreground are obtained, as before, by identifying points in the dividing line of the forms in plan and elevation and projecting these points by 45-deg. rays in plan and elevation through the *XY* line. Any edge or contour forming a dividing line which has already cast a part of its shadow on to any part of the plan or elevation of the form itself cannot again be represented. The shadow on the background resolves itself into a series of overlapping ellipses which are constructed in parallelograms as described in diagram 9, with their centres at C^1, C^2, C^3, C^4, C^5, C^6, C^7. The shadows of points S and T in the elevation are found at SS and TS on the background. The shadows of other salient points, namely, U, O, W, and X, etc., are similarly identified at US, OS, WS, and XS, etc. The shade on the detached cone on the right is found as in diagram 5. The surface of this cone also receives the shadow of the right vertical edge of the projecting niche form, and of a portion of the dividing line of the main cylinder. This shadow is a straight line at 45 deg. in plan. Its elevation, a curved line, is found by means of three horizontal slice circles, as shown. (See diagrams 1 and 2.)

(*To be continued*).

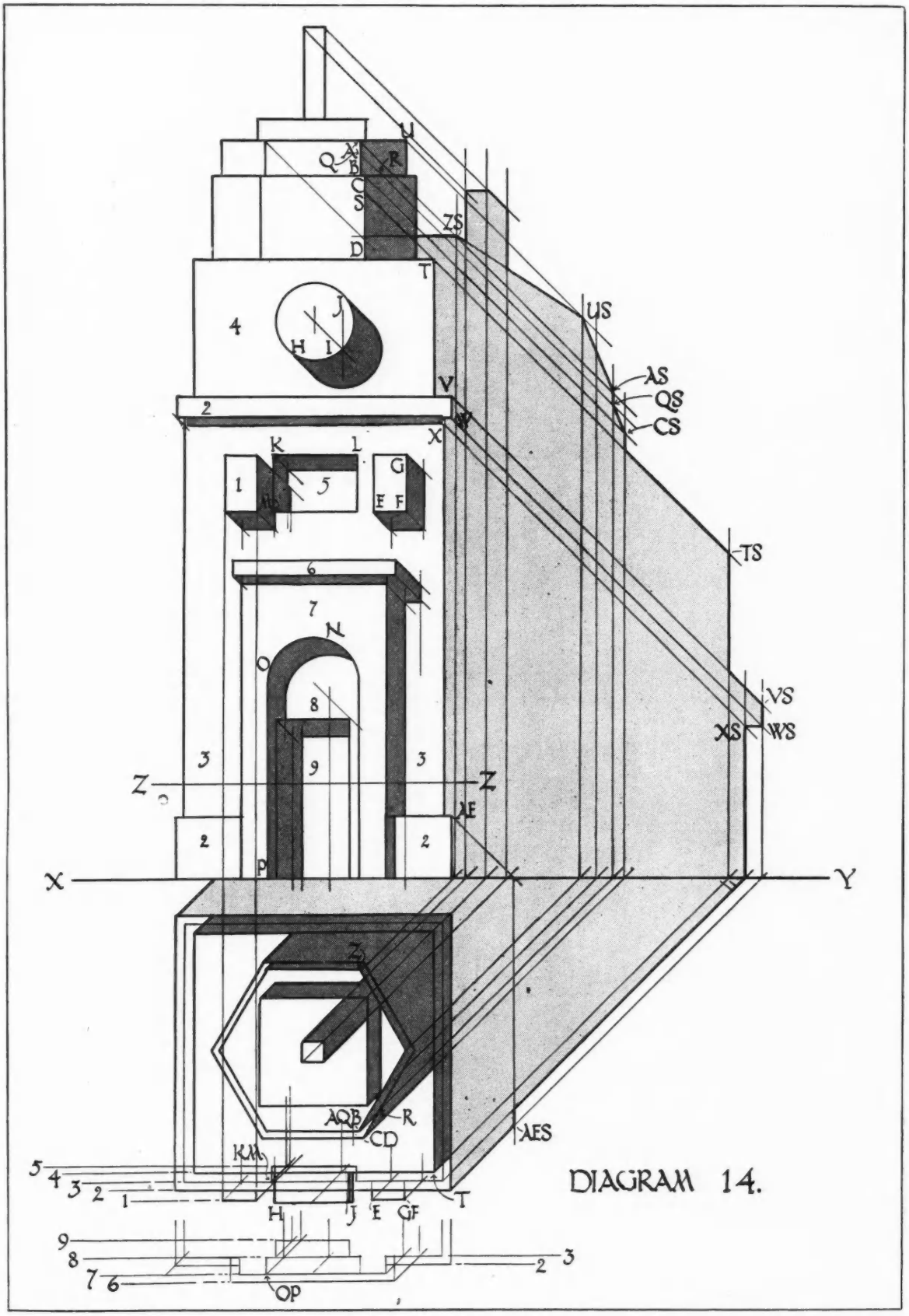


DIAGRAM 14.

Shadow Projection.] [*By John M. Holmes.*

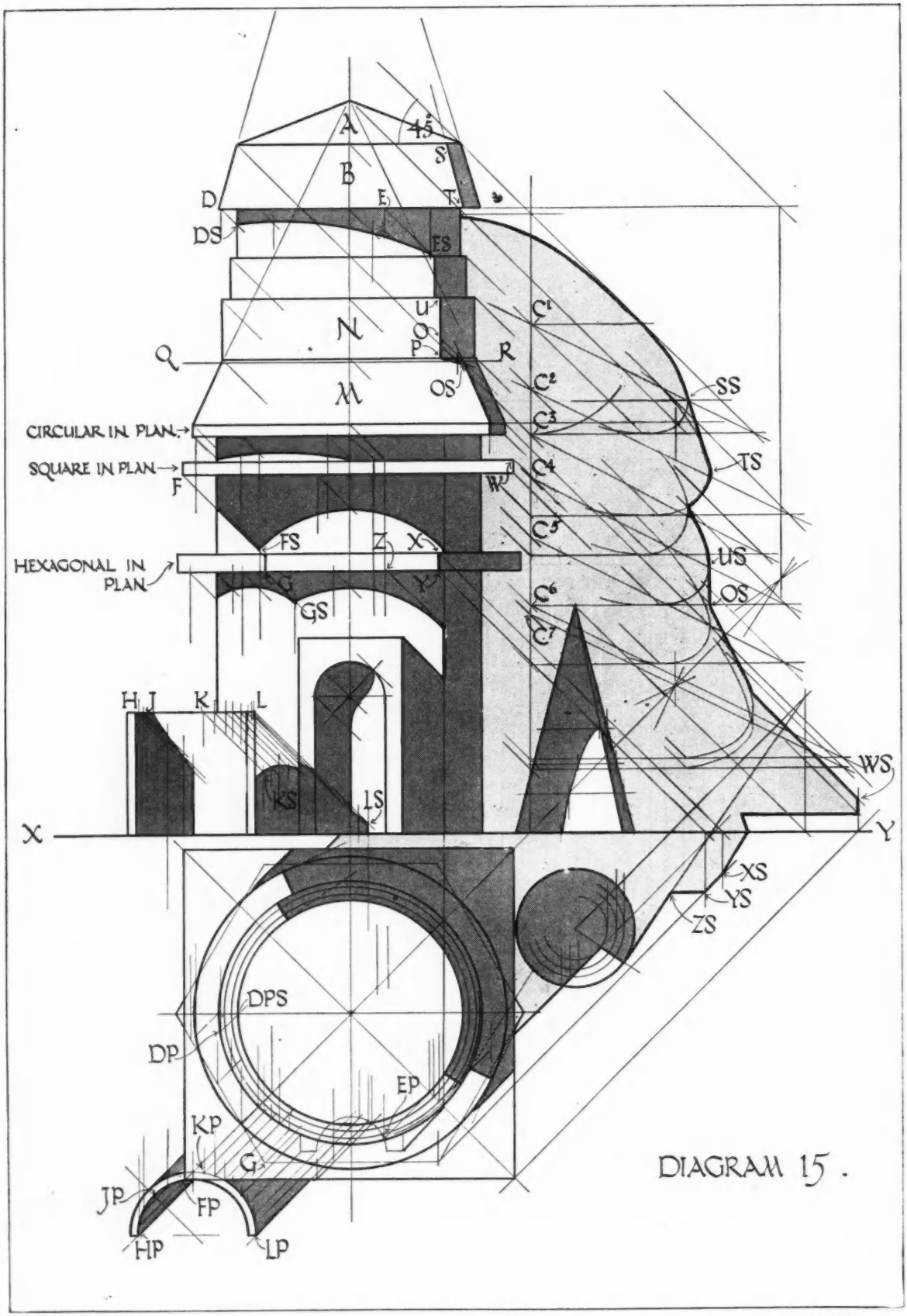
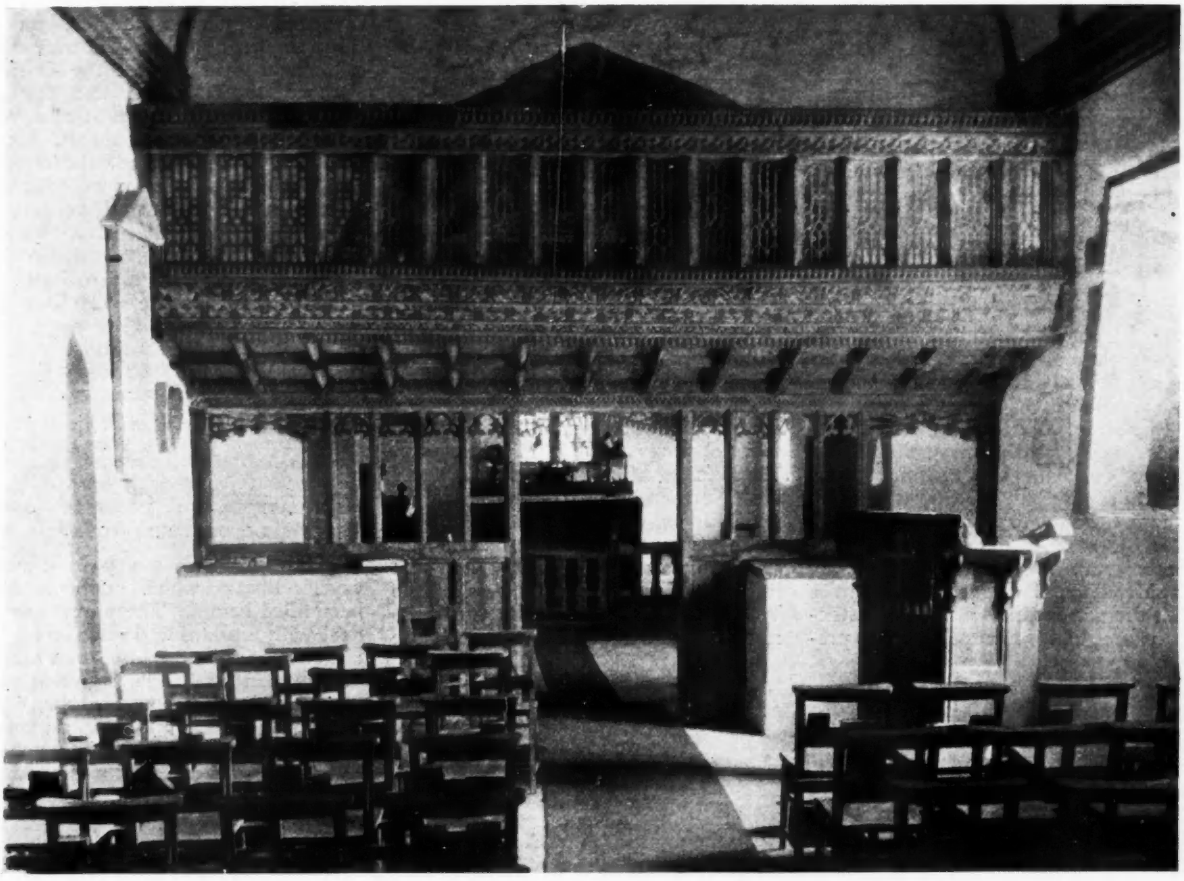


DIAGRAM 15.

Shadow Projection.] [*By John M. Holmes.*



A view in the interior of the church, looking towards the altar, and showing the medieval carved rood screen, the fabric and workmanship of which is in as perfect condition today as when it left the hands of the Tudor craftsmen.



The exterior of the church, which dates from the fifteenth century, but occupies the site of an earlier building.

THE CHURCH OF SAINT ISHOWA, PARTRISHOW, SOUTH WALES.

The photographs here reproduced are of the small parish church of a village near Crickhowell, in Brecknockshire, South Wales.

The rood screen is unique, in Great Britain, by reason of the "rood altars," which may be seen in the upper view. The building illustrated is the second of two erected in succession on the same site, and dates from Tudor days; the previous one was built in 1050-1080. The font, evidently a relic of the earlier church, bears an inscription that it was made in the time of Genillyen, a Welsh prince of approximately that date.



On the font is an inscription showing it to date from circa 1080, the period of the first church on the site.

LITERATURE

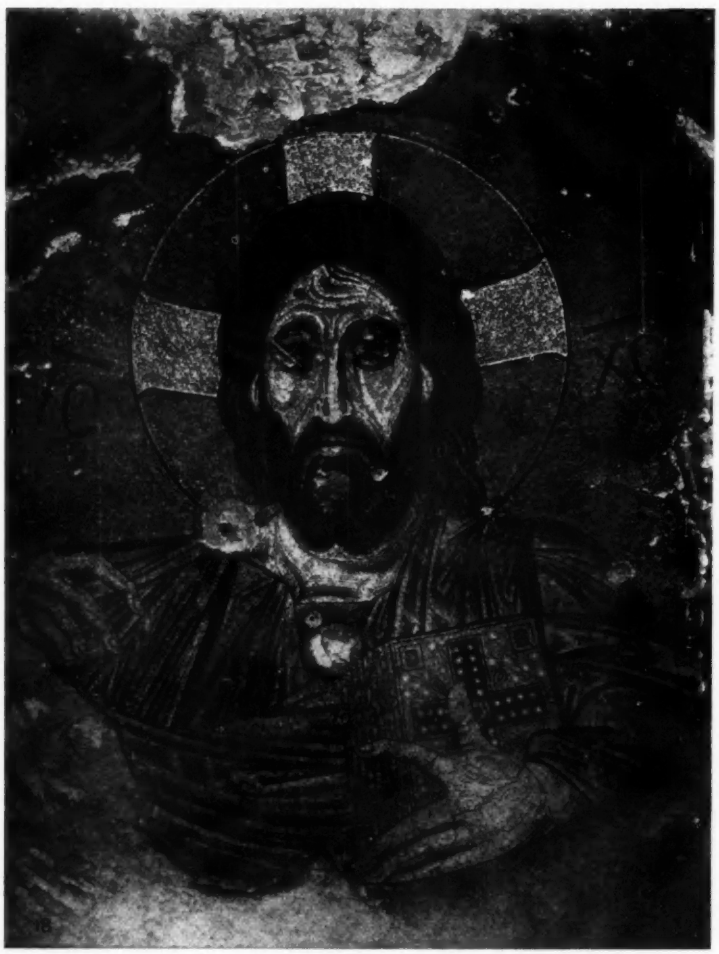
THE BYZANTINE ACHIEVEMENT

The artistic scepticism of Mr. Lytton Strachey is so much the vogue that I feel grateful to Mr. Byron for the relief of a genuinely scholarly enthusiasm. Apart from Froude and Macaulay, I can think of no historical writer who has so effectually suspended my disbelief in his case, unless it be Michelet. And his technique is theirs also—a thoroughly individual style, a massive scholarship, and an infatuation which does not boggle at a wholesale *suppressio veri*. At his best, Mr. Byron has a nervous directness that completely conceals his artfulness; his picture of the fall of Constantinople in 1453 deserves to be a classic.

The Byzantine Achievement is a comprehensive survey of Byzantine culture, considered as having strong affinities with the present, particularly in æsthetic expression. Byzantinism is presented as a blend of Greek and Oriental mysticism, stabilized by Roman law, and signalizing in its theocratic regimen its preoccupation with ultimate, eternal reality. It is this quest of reality which constitutes the claim of the Byzantines to our sympathy; their artistic outlook was essentially ours, and in deliberately rejecting the representational technique of the Greeks, the Byzantines broke for good with the materialism of Rome and the Western culture founded upon it. Such is Mr. Byron's thesis, and it is presented with a persuasive vehemence that obscures its alarming lacunæ. There is no attempt to explain away the Northern and Gothic element which is as vital in Western culture as the Oriental in Byzantinism; it is simply ignored, and one gathers the impression that the earthiness of the West is a fixed idea with Mr. Byron, so much so that his diatribes against the Roman See remind one of Mr. Kensit, save that they are a model of how the thing should be done. Set the Christ of Amiens over against the Christus Pantocrator of Daphni, and the gulf between the medieval East and West becomes one of environment, not of mental attitude; indeed, the serenity of the one argues a more satisfying solution of the problem of the ultimate than the wrath of the other. If, in a subsequent edition, Mr. Byron will dispose of the West categorically instead of generally, he will clinch the conviction of those whom his powers of presentation have already almost converted.

C CAMPBELL CROWTHER

The Byzantine Achievement, A.D. 330–1453. By Robert Byron. London: George Routledge and Sons, Ltd. Price 15s. net.



Christ, Ruler of the World. [*From* The Byzantine Achievement.]

ESTIMATING FOR PAINTERS' AND DECORATORS' WORK

This volume fills a gap in the surveyor's library which ought to have been filled before. Those works which deal with estimating do not give sufficient attention to this important branch of valuation; and there is a great want of discrimination and analytic treatment in the prices quoted in the building papers for such work. This volume contains results of many years' experience; it is thoroughly practical and has a scientific basis. The only work within our knowledge which approaches it in this respect is the *Serie des Prix* issued by the Paris Municipal Council, which treats many of the details of the schedule in a somewhat similar manner. It is rarely that one gets the advantage of so many actual records upon which estimates can be based. Such records as those dealing with the average percentage to be added to the net cost of the work to cover scaffolding, viz. 12½ per cent., are extremely useful, as also are the details as to establishment costs given on page 155. One of the chief difficulties in dealing with price-books is that during the life of an edition considerable changes may take place, both in wages and cost of materials. To obviate this the author has published the rates of wages and the cost of materials upon which his prices are based so that any adjustments may be made as may be necessary.

The author would like to see the return to painted walls instead of paper, and adduces arguments on page 143 to show that substantially the paper costs rather more than water-paint or flat wall paint. He supplements his argument by endeavouring to show that oil paint is also cheaper by 33⅓ per cent., but he allows only three coats, which is not sufficient to make a good job, and he overlooks the fact that unless he uses Sirapite for the plastering,

re is an additional cost to be added the plastering.

It is not generally realized that the establishment charges of a master painter are so high as they are. According to Mr. Oliver these amount to nearly 25 per cent., and that is a factor which must be taken into account in estimating for painting.

Very little attention is given to the question of spray painting, which is now frequently adopted. We find it referred to on page 147, where the price of 6s. per ton per coat is quoted, but it is not clear whether this is for hand work or mechanical work. The price works out to about the same as for hand work, whereas it . ally admitted that there is a very considerable saving when the paint i mechanically applied, as the records go to show that about five times the surface covered by hand can be covered in the same time mechanically.

H. J. L.

Estimating for Painters' and Decorators' Work. By Charles E. Oliver. The Trade Papers Publishing Co. Ltd. Price 12s. 6d. net.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

Captain Cazalet asked the Prime Minister whether he contemplated introducing any legislation which would prevent the sale or removal from this country of buildings, relics, or works of art which were of national and historic artistic importance.

Mr. MacDonald said this was a matter which had frequently been considered in recent years. A committee of the National Gallery trustees reported on the subject in 1913 (Cd. 6378, 1915) and recommended that such legislation was inadvisable. But, as regarded buildings, certain powers of protection and preservation were given to the Commissioners of Works by the Ancient Monuments Consolidation and Amendment Act, 1913; and, as regarded objects of national interest generally, the exemptions from estate, etc., duty granted by the Finance Acts, as summarized in section 44 of the Finance Act, 1921, were designed to secure a similar purpose. Successive Governments had also undertaken to provide funds, when necessary, towards the cost of purchasing for the National Gallery certain pictures of primary importance. The "Cornaro Titian" and the "Wilton Diptych" were recently purchased with Government help under this arrangement.

He did not think that it was practicable or desirable to introduce further legislation on the subject at the present time, but he was keenly interested in this subject and always open to consider suggestions.

Ribbon Development

Sir D. Newton asked the Minister of Health whether he was aware that ribbon-building was destroying the amenities and reducing the effective width of many main roads in rural areas; and if he was prepared to empower local authorities to charge a frontage fee on new rateable property along the existing roads, to be used for the development of frontages on other roads approved by housing committees, or to deal with the difficulty by some other method.

Mr. Greenwood said he was aware of the disadvantages of ribbon development. They might be reduced, though by no means always prevented, by town planning, especially by negotiation with owners. Schemes might provide for frontage charges in certain cases where a road had been made under the scheme. He hoped to consider at an opportune time whether more could be done.

Slum Clearance Schemes

Mr. Greenwood informed Captain Margesson that since January 1, 1924, eighty-six slum clearance schemes had been confirmed by his department. Up to April 1 last, the latest date to which information was at present available, fourteen of those schemes had been fully completed, and sixty-six were in course of execution.

Commander Bellairs asked the Minister of Health how many buildings had been taken possession of since April 1925 under the powers provided in section 46 of the 1925 Housing Act; and, in view of the admitted confiscatory powers and repeated promises of remedial legislation, whether steps would be taken to provide adequate compensation.

Mr. Greenwood said that the total number of buildings, including those taken only for the purpose of making schemes efficient, which had been acquired by local authorities under improvement or reconstruction schemes since April 1, 1925, was 9,423 on April 1 last, the latest date for which figures were available. The question of further legislation to facilitate dealing with slum areas was receiving his consideration, but Commander Bellairs must not take it that he accepted his description of the existing provisions and obviously he was not bound by any promises which might have been made in this matter by the previous administration.

Subsidy Housing Progress

Mr. Simon asked the Minister of Health if he could state the number of subsidy houses built by local authorities and by private enterprise, respectively, under the Housing Acts of 1923 and 1924 which had been completed in each month of the present year.

Mr. Greenwood said that the following statement gives the information desired for each of the first five months of the present year. Similar figures for the month of June were not yet available:

Month	Houses included in Schemes under the Housing Acts of 1923 and 1924, completed during month by	
	Local Authorities	Private Enterprise
1929		
January ..	3,935	3,195
February ..	2,422	2,662
March ..	4,408	3,603
April ..	4,566	4,725
May ..	4,559	4,810

Mr. Simon also asked the Minister whether he was aware of the hardship caused to owners of small houses by unexpected and excessive charges, amounting in some cases to over £200 per house, for paving and making-up the road fronting the house; and whether he was prepared to take action to prevent this.

Miss Lawrence, who replied, said that the Minister proposed to look into this matter. There was an appeal against frontage charges by local authorities and power for local authorities to make a contribution.

LAW REPORT

DISPUTED CLAIM FOR REPAIRS

Dew v. *Summers. Before Mr. E. W. Hansell, K.C., Official Referee*

This was a claim by Mr. W. Dew, builder and decorator, of Southbrook Road, Lee, against Mrs. Summers, of 173a Brompton Road, to recover the sum of £259, balance of account for work done and materials supplied to a flat.

Mr. Monier Williams appeared for the plaintiff, and Mr. Slade for the defendant.

Defendant, by her defence, denied that she was indebted to the plaintiff for the amount claimed. She said at first there was an agreement to do certain work for sums amounting to just over £100. There were, however, variations. It was a term of contract, she pleaded, that the work should be carried out in a proper and workmanlike manner and that the flat should be ready for her occupation not later than middle December 1927. Defendant alleged that the work was not executed in a proper or workmanlike manner to the defendant's satisfaction, and that the plaintiff did not complete the work within the time stipulated or within a reasonable time after. Defendant alleged that the charges were unreasonable and that it would cost her £50 to have the work

completed. She paid £100 into Court in satisfaction of the plaintiff's claim. At the same time she set up a counter-claim for expenses incurred by her and loss of rent.

Plaintiff, in his reply, admitted that he undertook to do certain work for £58 and £17 10s., but that agreement, he said, was rescinded having regard to the numerous additions and alterations in regard to work to be done made by the defendant. The work was carried out on that basis. He did the work required by the plaintiff and supplied the materials. Plaintiff said he completed the work in a reasonable time and that his charges were fair and reasonable charges.

Plaintiff, in evidence, said he received no complaints in regard to his work till after the work was completed. All the work he contracted to do he did and completed.

Mr. G. T. Harman, A.R.I.B.A., who had inspected the flat, said all the work charged for had been done, and in his opinion the charges were fair and reasonable.

Cross-examined: In his opinion it was necessary to repaper a room where the electricians had cut chases in the walls for the electric wires. The paper could not be patched up.

Mrs. Summers, the defendant, gave evidence and declared that she told plaintiff that she must have her flat finished and ready for occupation by December 17, 1927. She did not, however, get in till the New Year. It was not ready for her on December 17. She did not give additional orders and so cause delay.

Other evidence was given in support of defendant's case.

The official referee found in favour of the plaintiff and awarded him £120 2s. 6d., and costs.

SOCIETIES AND INSTITUTIONS

THE ABBEY SACRISTY

A protest against the proposed new sacristy at Westminster Abbey was made by Sir Frank Baines, presiding at the annual meeting of the Society for the Protection of Ancient Buildings, held at the R.I.B.A. The very essence and soul of our creed with regard to the preservation of ancient buildings and their historical antiquity is outraged by this proposal, he said. We cannot temporize with it. It is utterly beyond the pale of thought, and we must reaffirm our determination to discourage to the very fullest extent of our power such an act of unparalleled vandalism as is proposed. It would be a disaster to the history of England if the scheme ever came to fruition.

THE BARTLETT SCHOOL OF ARCHITECTURE

The following awards have been made at University College in the Faculty of Arts—Bartlett School of Architecture:

Trevelyan Goodall Entrance Scholarship (tenable in the Bartlett School of Architecture and in the Slade School of Fine Art). S. Gilbert (University College School).

Entrance Exhibitions. First: J. E. A. Brownrigg (Charterhouse School); second (divided equally): G. A. Crockett (Hackney Downs Grocers' Company School) and L. T. Wilkins (Merchant Taylors' School).

THE ARCHITECTS' JOURNAL Prize (for the best final design produced in the day school by a fourth-year degree or diploma student): E. C. Northover.

The Builder Prizes (for the best sets of measured drawings of old work). Senior: W. R Hall, Junior: E. F. Starling.

Prize for Design in Ferro-concrete (by a member of the Atelier). Subject: An Open-air Theatre: Patricia B. Webster.

Walston Prize (for design by a member of the Atelier). Subject: A Petrol Station. E. E. Somaké.

Certificate in Architecture. B. J. Ashwell, B. Bell, E. L. W. Davies, J. M. Forsyth, C. A. Knight, A. F. Marlow, R. F. Neale, E. C. Northover, D. A. Stewart.

Certificate in Town Planning. L. J. H. Cunningham, E. G. S. Elliot, A. A. Flower, F. L. Lambert, A. A. K. Shaikh.

READERS' QUERIES

OLD BRICKS WITH NEW

E. W. writes: "I propose using some old bricks, which are in good condition, in new brickwork on the same site in the centre of a Midland industrial city. The walling from which the old bricks were taken was in lime mortar. Should they be rebuilt in lime or in cement mortar? Would cement joints cause the bricks to decay?"

The bricks must be built in lime mortar to maintain the normal transpiration of the brick-and-mortar compost. Cement is less pervious to moisture, and leaves to the brick the work of acting as the solution agent, so that by constant wetting and drying by change of weather it allows the salts in the cement to traverse it and in time to weaken it. There is a limit to this state of affairs, however, for if the bricks are very hard and well burnt they may be as near as possible to the solution value of the cement mortar and the salts would go out through the mortar. A Midland industrial city is not the place to take risks, and unless the bricks are very hard the lime mortar should be relied upon, with all precautions against the greater settlement and weaker strength of the wall as a whole.

W. H.

DAMPNESS IN A HOUSE

J. H. writes: "Damp has appeared in a brick house built two years ago. The house is detached, and is well built. The front door faces south, the drawing-room west, and the dining-room and kitchen east, the usual offices being on the north. The west side of the house, which suffers the most rain, is the driest; it has a chimney in, and is a 14 in. wall. The other part of the building has 9 in. walls. The house is built in mortar. The damp is worst in the bedrooms on the north side, and the dining-room on the east and south sides. The damp shows on the inside only, and the wallpapers and plaster are in a deplorable condition. It usually shows in the wall from about 4-6 in. to 5 ft. from the floor, which seems to prove it is not due to poorness of dampcoursing. I believe the damp is due to the mortar being porous; and the bricks having no suction the dry plaster draws it through the joint."

The use of 9 in. walls is in itself a sufficient reason for the appearance of damp in the interior. It would be possible to make a sounder and a more damp-resisting house of it by adding an outer skin of brickwork half a brick thick with a 2-in. cavity between the old work and the new skin.

The outer overcoat of brickwork might be separated from the inner by a continuous coat of a waterproofing material, instead of by an air space, if the extra thickness of walling is to be reduced as much as possible; or hanging tiles made to show brick sizes on the exterior might be adopted instead of the overcoat of brickwork. These methods promise a lasting cure and improve the structural strength of the house, beside rendering it damp-resisting.

Repointing the existing brickwork in cement would not effect a cure, though it might reduce the degree of penetration by moisture.

The effects of dampness in the interior of a house are sometimes concealed by adding an inner lining of thin waterproof fibrous plaster slabs to the damp walls.

The slabs are provided with a thin layer of asphaltic material on the side that is to be fixed to the old wall, but are absorbent on the side next the room, to avoid the creation of beads of condensation water. Alternatively, the inside of the damp wall may be stripped of plaster and rendered with Portland cement, to which waterproofing materials have been added. Upper coats of absorbent plaster are then laid in the usual manner above this protective coating. It is possible that a combination of several of these devices might be found suitable.

An extra thickness of brickwork to make all walls equivalent to brick and a half would seem to be appropriate in a house costing £6,000, but if the extra thickness is likely to spoil the proportions in any part, some of the other measures might be tried.

W. H.

TRADE NOTES

The directors of the Midland Bank, Ltd., announce an interim dividend for the half-year ended June 30 last at the rate of 18 per cent. per annum less income tax, payable on July 15. The dividend for the corresponding period of 1928 was at the same rate. The directors announce with regret the retirement of Mr. E. W. Woolley from the position of joint managing director after having completed upwards of forty-six years' service with the bank. Mr. Woolley retains his seat on the Board.

The Standing Committee appointed by the Board of Trade will hold an inquiry at 11.30 a.m. on July 29 as to whether imported Portland cement should bear an indication of origin. The inquiry will be held at the Board of Trade Offices, Great George Street, London, S.W.1. Communications should be addressed to Mr. E. W. Reardon, secretary.

Following the modern methods of building construction, the next step is to secure the most efficient system of ventilation. Messrs. G. A. Harvey & Co. (London), Ltd., illustrate in their catalogue No. 444 many types of ventilators, and on pages 62 and 63 give prices of ventilating pipes of all diameters from 6 in. to 24 in. Messrs. Harvey manufacture steel ventilating air ducts of every description, and are always pleased to send and discuss propositions and take particulars of architects' and their clients' requirements.

Mr. F. G. Lucas, chairman and managing director of the Brilliant Sign Co. (1907), Ltd., presided at a shareholders' luncheon held as a prelude to the annual general meeting, and principally to give the wife of the managing director, Mrs. E. E. Lucas, the opportunity of laying the foundation-stone for the extension of the company's works. This extension comprises a two-story building. It will contain approximately 30,000 super square feet of floor space which, when completed (anticipated by the end of September), will give the company a floor space of over 200,000 ft. super. An extra 100 employees will find work in this extension. Further to the co-operative system introduced at the beginning of the year, when the Board was reconstituted on more progressive lines and several departments brought more up to date, it has been decided by the new board of directors to extend this system by transferring to other members of the staff blocks of shares on similar terms to those transferred in January last.

THE BUILDINGS ILLUSTRATED

Following are the names of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

London School of Hygiene and Tropical Medicine (pages 84-89). James Carmichael, Ltd., general contractor; A. D. Dawnay and Sons, Ltd., steelwork; Kleine Co., fire-resisting construction; South-Western Stone Co., stone; Limmer and Trinidad Co., asphalt; Henry Hope and Sons, Ltd., steel casements; Fenning & Co., marble and terrazzo; Fram Reinforced Concrete Co., cylenz flooring; Starkie Gardner, metalwork; Light Steel Construction Co., steel construction; Chiswick Guild, special joinery; G. N. Haden and Sons, radiant panel heating and ventilation, and fire hydrant; Beaven and Sons, sanitary fittings, plumbing, and drainage; Best and Lloyd, Ltd., electric light fittings; Cash & Co., electrical contractors; Hollis Bros., Ltd., and Acme Flooring Co., wood-block flooring; Aldous and Campbell, lifts; Walterdew & Co., cinema installation and chairs; Siemens Bros. & Co., automatic phones; Synchronome Co., clocks; J. and E. Hall, refrigerators; Vitaglass Co., vitaglass; Pilkington Bros., Ltd., plate glass; T. and W. Farmiloe, nine elms stone.

The Leicester City Omnibus Garage (pages 97-99). F. J. Bradford, brickwork; Geo. Gurney and C. E. Sutton, woodwork; Potter and Sons and J. Coltman & Co., Ltd., steelwork; Constone, Ltd., and John Ellis and Sons, precast stone and concrete floors; Leicester Asphalte and Tar Paving Co., asphalt flats, etc.; Crittall Manufacturing Co., Ltd., steel windows; Mellowes, Ltd., patent glazing, steel lanterns, and steel windows; "Coburn" Tracking, tracking to large entrance gates; "Esavian" Tracking, tracking to workshop entrance; Young, Austen and Young, Ltd., and Seaton and Peet, Ltd., heating installation; F. J. Yates & Co., and Leicester Corporation, electric lighting; Shell-Mex, Ltd., petrol installation; The Farnley Iron Co., Ltd., glazed bricks in lavatories and inspection pits.

Wyggeston Grammar School for Girls (pages 91-94). General contractors, Chitham & Co. Sub-contractors: Hewitt & Co., asphalt; British Reinforced Concrete Co., reinforced concrete; Leverstock Acorn Grey and Woodville Sandstock, bricks; Empire Stone Co., Ltd., artificial stone and stonework; R. Searle & Co., Ltd., structural steel; Colthurst, Symonds & Co., Ltd., pantiles; Weston and Boulton, tilers; Ruberoid, roofing felt; Mellowes & Co., patent glazing; Siegwart Fireproof Floor Co., Ltd., and British Dolomont Co., Ltd., patent flooring; Kerner Greenwood & Co., Ltd., Pudlo waterproofing materials; Hollis Bros. & Co., Ltd., oak block flooring; Young, Austen and Young, central heating; Beeston Boiler Co., Ltd., and National Radiator Co., radiators; Doulton & Co., sanitary fittings and laboratory gas fixtures; Beeston Boiler Co., boilers; Gent, Hurley and Orringe, electric wiring; Henry Hope and Sons, Ltd., "Austral" sashes and casements, window furniture, and sunblinds; Gent, Hurley and Orringe, bells; Dryad Metal Works, wrought metalwork, gates, electric light fixtures, and metalwork; Celotex Co., soundproofing; Bath Artcraft, Ltd., decorative plaster and mantels; Porcelain Tile Co., tiling; Walpamur Co., Ltd., "Walpamur" water paint; "Ripolin" enamel dadoes, walls; Leicester Cabinet Co., library panelling and furniture; North of England School Furnishing Co., school fittings; Parker, Winder and Achurch, cloakroom fittings; Rushworth and Draper, organ.

COMPETITION CALENDAR

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should be made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea before July 20. Deposit £2 2s.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

19388. Biggs, J. F. Sliding windows. June 24.

19276. Brown, J. Joints for windows, &c. June 24.

19526. Cleveland, F. W. Sound-proof doors, &c. June 25.

19856. Eastwood, G. W. Mounting doors, windows, &c. June 28.

19879. Miller, H. Door fittings. June 28.

SPECIFICATIONS PUBLISHED

284219. Laboratoire de Perfectionnements Thermiques. Chimneys, flues, and like structures.

287556. Laboratoire de Perfectionnements Thermiques. Walls, furnaces, and installations formed of refractory materials resistant to destructive effects, and method and means for their production.

287121. Kragt, W. J. Van Der. Bricks provided with means for attaching members to masonry.

314139. Mountjoy, R. G. Roofs and roofing.

314189. Jackson, L. Mellersh (Insley Manufacturing Co.). Building material.

ABSTRACT PUBLISHED

311409. Hofer, P., 7 Delsbergerallee, Basle, Switzerland. Floors.

The Austrian Legation, 18 Belgrave Square, S.W.1, will be glad to receive enquiries concerning the improvements made in lattice framework for buildings by J. Zenz, F. Grobl, and M. Moser, to whom a British patent, No. 290,129, was granted in 1928.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The L.C.C. is acquiring a site of 10 acres of land at STAMFORD HILL for the erection of tenements.

The Metropolitan Water Board is to remodel the SURBITON and DITTON works at a cost of £220,000.

The EAST HAM borough engineer has prepared detailed estimates for the extension of the isolation hospital. The cost is computed at £41,330.

Plans passed at SANDERSTEAD: Bungalow, Kingswood Way, for Mrs. C. L. Comber; house, Addington Road, for Mr. Geo. King; house, The Church Way, for Mr. Frank Flood; house, Limpsfield Road, for Mr. F. Good; bungalow, Farleigh Road, for Mr. S. T. Hipwell; bungalow, Farleigh Road, for Mr. G. King.

Plans passed by the EAST HAM Corporation: Shop, 248 Barking Road, for Messrs. Watsons; bank, 26 High Street North, for Westminster Bank, for Mr. J. A. Dartnall; extensions, East Ham Men's Club, Barking Road, for Mr. E. Meredith; factory, 451 Katherine Road, for Mr R. C. Temple Gordon; stores, Barking Road, for Swedish Timber Co.

Plans passed at PURLEY: Four houses, Green Lane, for Messrs. W. R. Roach; house, Smitham Downs Road, for Messrs. R. D. Taylor, Ltd.; house, Woodcrest Road, for Messrs. R. D. Taylor, Ltd.; two houses, Purley Bury Avenue, for Mr. W. J. Frewing; two houses, Riddlesdown Avenue, for Mr. G. Peskett; house, Purley Hill, for Mr. C. H. Deane; house, Selcroft Road, for Mr. S. C. Kirby; five houses, Woodcrest Road, for Mr. N. A. Harvey; two houses, Purley Bury Avenue, for Mr. W. J. Frewing.

Plans passed by the COULSDON U.D.C.: Two houses, Victoria Avenue, for Messrs. Clout and Tysoe; eight houses, new road between Bradmore Way and Marlpit Lane, for Mr. C. H. Kenworthy; ten shops and flats, Chipstead Valley Road, for Mr. A. H. Jemmings; alterations and additions, branch bank, Brighton Road, for Barclays Bank, Ltd.; house, Downs Road, for Mr. R. E. Jones; twelve houses, Whyteleafe estate, for Messrs. O'Sullivan, Ltd.; twelve houses, Westleigh Avenue, for Messrs. H. Hemmings, Ltd.; eight houses, St. Andrew's Road, for Mr. H. J. Salter; house, Marlpit Lane, for Mrs. L. Jennings.

Plans passed by the FINCHLEY U.D.C.: Three houses, Coleridge Road, for Mr. J. Hatchett; foundry, Friern Park, for Messrs. Specialloid, Ltd.; extension to depot, 39 High Road, for United Dairies (London), Ltd.; thirty-nine garages, rear of various houses in West Avenue, for Mr. P. D. Walker; eight flats, Neale Close, for Hampstead Tenants, Ltd.; seven houses, St. Mary's Avenue, for the West Streatham Building Co., Ltd.; four houses, Deansway, for the Oakwood Tenants, Ltd.; twenty-one houses, between Station Road and railway, for Mr. W. Hollis; alterations and additions, Kensit Memorial College, Hendon Lane, for Mr. J. A. Kensit; extension to sub-stations, Hill Rise and Percy Road, for the U.D.C., Electricity Committee; house, High Road, for Mr. R. J. Evans.

EASTERN COUNTIES

The COLCHESTER Corporation has asked the borough engineer to prepare revised estimates for the erection, by direct labour, of twenty-eight houses at Defoe Crescent.

Plans passed by the COLCHESTER Corporation: House, Straight Road, Lexden, for Mr. W. A. Hills; house, Gladwin Road, for Messrs. Appleton and Sons; house, Layer Road, for Country Service Association, Ltd.; house, Straight Road, Shrub End, for Messrs. J. Moss and Son; four washhouses, Artillery Street, for Messrs. W. A. Hills and Sons; house, Victoria Road, for Mr. J. N. McPherson Burton; house, road off Old Heath Road, for Mr. C. Fisher; alterations and additions, East Mills, for Messrs. Brown and Burgess; alterations, 146 High Street, for Messrs. Duncan W. Clark and Beckett, on behalf of Messrs. Fenn, Wright & Co.; bungalow, Bergholt Road, for Mr. B. Oliver; alterations and additions, 115 North Station Road, for Mr. J. M. McPherson Burton, on behalf of The Priory, Ltd.; alterations, "Robin Hood" public-house, Standwell Street, for Mr. P. H. Lomax, on behalf of Messrs. Ind, Coope & Co., Ltd.

SOUTH-WESTERN COUNTIES

The BRISTOL Education Committee has obtained a site at Portway for the erection of an elementary school.

The BRISTOL Corporation has considered a proposal to erect 228 houses on a site at Shirehampton at a cost of £105,860.

The BRISTOL Corporation has prepared revised estimates for the municipal aerodrome at a cost of £30,000. The club house and hangars will cost £5,000.

The PLYMOUTH Corporation has agreed to the revised scheme of the Starcross Hospital Joint Committee for extensions at the mental institution at a cost of £196,000 for 530 beds. The Institution Committee is to provide a hostel for women at Exeter, and also a seaside home.

Plans passed by the PLYMOUTH Corporation: Two shops, Princess Street, Devonport, for Mr. E. Goldham; two houses, Burnham Park Road, for Mr. E. J. Morrish; four houses, Burleigh Lane, for Messrs. S. Tellam and Sons; eight houses, Fircroft Road, for Mr. J. W. Binmore; sub-station and shelter, Beaumont Park, for Plymouth Corporation Electricity Department; shop, rear of 1 Cranbourne Avenue, for Mr. P. S. Pike; twelve houses, Glenavon Road, for Mr. G. H. Webber; house, Venn Way, for Mr. J. W. L. Hawke; six houses, new street, off Underhill Road, for Mr. C. Pollard; nineteen garages, rear of Radford Road, for Embankment Motor Co.

MIDLAND COUNTIES

The ILKESTON Corporation has appointed a subcommittee to consider the acquisition of further housing sites.

The CHESTERFIELD Corporation Markets Committee has asked the borough surveyor to submit plans for the erection of a series of slaughterhouses on the abattoir site.

The CHESTERFIELD Education Committee is seeking sanction to borrow £19,500 for the erection and equipment of the William Rhodes School, Boythorpe.

Plans passed by the DUDLEY Corporation: Bungalow, Yew Tree Hills, Netherton, for Mr. F. Billingham; house, Oakham Road, for Mr. W. Russon; house, off New Rowley Road, for Mr. C. P. Blewitt; two cottages, Watson's Green Road, for Mr. J. Pickerill.

Plans passed by the CHESTERFIELD Corporation: Shop, South Street, New Whittington, for Mr. G. Sims; boiler-house, Docks Walk, for Mr. C. E. Gaunt; house and shop, Springfield Avenue, for Mr. A. Cole; extensions, Burlington Street, for Messrs. Greville and Stuart; abattoir, Wheatbridge Road, for the Chesterfield Co-operative Society; church, Derby Road, for the vicar and churchwardens of St. Augustine's Church, Chesterfield; house and shop, Springfield Avenue, for Mr. A. Cole; new balcony, Victoria Picture House, Knifesmith Gate, for Victoria Enterprises, Ltd.; extensions, Walton Works, for Messrs. Robinson and Sons, Ltd.; alterations, Star and Garter Inn, New Square, for Scarsdale Brewery Co., Ltd.; pump and engine-house, Canal Wharf, for Shell Mex, Ltd.

NORTHERN COUNTIES

The Board of Education has approved the plans for the erection of two new Catholic schools at MANCHESTER.

The SHEFFIELD Corporation has obtained sanction for a loan of £54,500 for the erection of houses on the Wisewood estate.

The SHEFFIELD Corporation has voted £14,350 for the erection of new premises in Scotland Street for printing and stationery department.

The STRETFORD U.D.C. has approved the scheme for the erection of a public hall, library, and washhouses. Application is to be made for the necessary borrowing powers.

The HULL Education Committee has obtained sanction to borrow £15,994 for the erection of a public elementary school (first portion) at Hall Road.

The HULL Corporation has decided to seek powers in the next session of Parliament for the construction of further waterworks, and asked the water engineer to prepare any necessary plans and estimates.

The LEEDS Corporation has considered the question of obtaining tenders for the erection of shops and offices in Guildford Street and decided to obtain such tenders when the time is considered appropriate.

The MANCHESTER Corporation has obtained the approval of the Ministry of Health to the erection of 2,500 houses under the Housing (Financial Provisions) Act, 1924, and a proposed community centre, Wilbraham Road estate.

The LEEDS Corporation has approved plans submitted by the University of Leeds showing a suggested variation of the line of University Road in connection with the proposals for the extension of the university.

Sanction has been received by the STALYBRIDGE Corporation to borrow £56,354 for the erection of houses on the Brushes Road site; £47,019 for the erection of houses on the Hague site; and £4,934 for domestic science rooms in connection with the central council school.

The OLDHAM Corporation Baths Committee has had under discussion a proposal for the erection of a public washhouse on land under the control of the committee adjoining the Hollinwood Baths. It has decided to consider the question at the next meeting.





A house in Somerset. By Eric Francis. On the right is the entrance from the terrace. The house stands in a hollow in the hillside and is so designed that views are obtained south-west of Dunkery Beacon, and south-east down a valley in the hills opposite. *Plans of this building appear on page 113.*

The CARLISLE Watch Committee has passed plans for the erection of a new fire station on the present site in Spring Gardens Lane, and for twelve houses for the accommodation of members of the fire brigade, at a total estimated cost of £13,390.

Plans passed by the OTLEY U.D.C.: House and shop, Bradford Road, for Mr. D. Richardson; two houses and shops, Bradford Road, for Mrs. H. Shaw; six houses, Bradford Road, for Mr. T. A. Smith; two houses, Leeds Road, for Messrs. F. and J. Robinson.

The LEEDS Corporation Housing Committee has decided to invite tenders for the erection of 100 houses and cottage flats on the Westfield estate, Stanningley Road, and fifty houses on the Dewsbury Road estate. The city engineer is to submit an estimate of cost of erecting the houses.

Plans passed by the HULL Corporation: Four houses, Watt Street, for Mr. C. H. Smith; house, Belgrave Drive, for Mr. W. H. Collins; six houses, Belgrave Drive, for Mr. F. C. Polley; three houses, Southfield Road, for Mr. E. Mowforth; two houses, Southfield Road, for Messrs. Robinson and Sawdon.

Messrs. Courtaulds are to erect an up-to-date factory at Ribbleton, PRESTON, on lines similar to their garden silk mill at Wolverhampton. The preliminary cost is in the region of £40,000, and the whole scheme, which is only in the early stages, is estimated to cost anything between £500,000 and £1,000,000.

Plans passed by the BIRKENHEAD Corporation: Garages and store, Woodchurch Road; extension to dyehouse, Tapestry Works, Stanley Road; house, Osmaston Road; addition, rear of Masonic Hall, Oliver Street; three houses and shops, Old Chester Road and Southdale Road; alterations to house and shop, 37 Union Street; two houses, Carlaw Road and Woodchurch Road.

The SHEFFIELD Corporation has appointed a sub-committee to take all necessary steps in connection with the erection of a new central library and art gallery. The committee has approved a sketch plan and elevation of the proposed building submitted by the city architect and instructed him to take the necessary steps to prepare detailed plans.

Plans passed by ROTHERHAM Corporation: Shop, Badsley Moor Lane, for Mr. A. Thompson; store room, boiler-room, etc., John Street, for the Rotherham Co-operative Society, Ltd.; extension of works, Sheffield Road, for Messrs. McCall & Co., Ltd.; club premises, Bradgate Lane, for the Bradgate Working Men's Club and Institute.

The MANCHESTER Education Committee has decided to proceed with the erection of the following schools: Burnage High School for Boys, £55,072; Kingsway elementary school, £10,092; Withington elementary school, £9,572; Levenshulme High School for Girls, £66,075; North Manchester High School for Boys, £54,337.

Plans passed by the CARLISLE Corporation: Garages, Harraby, for Messrs. T. Brown & Co., Ltd.; layout, London Road, for Messrs. Benwell and Slack (architects), for Harrison's and Hetherington's Auction Marts, Ltd.; four houses, Dalston Road, for Mr. G. Armstrong (architect); alterations, 30 and 32 Botchergate, for Mr. S. J. Bartlett (architect), for Boots Drug Co., Ltd.; weaving-shed, Holme Head, for Messrs. Ferguson Bros., Ltd.

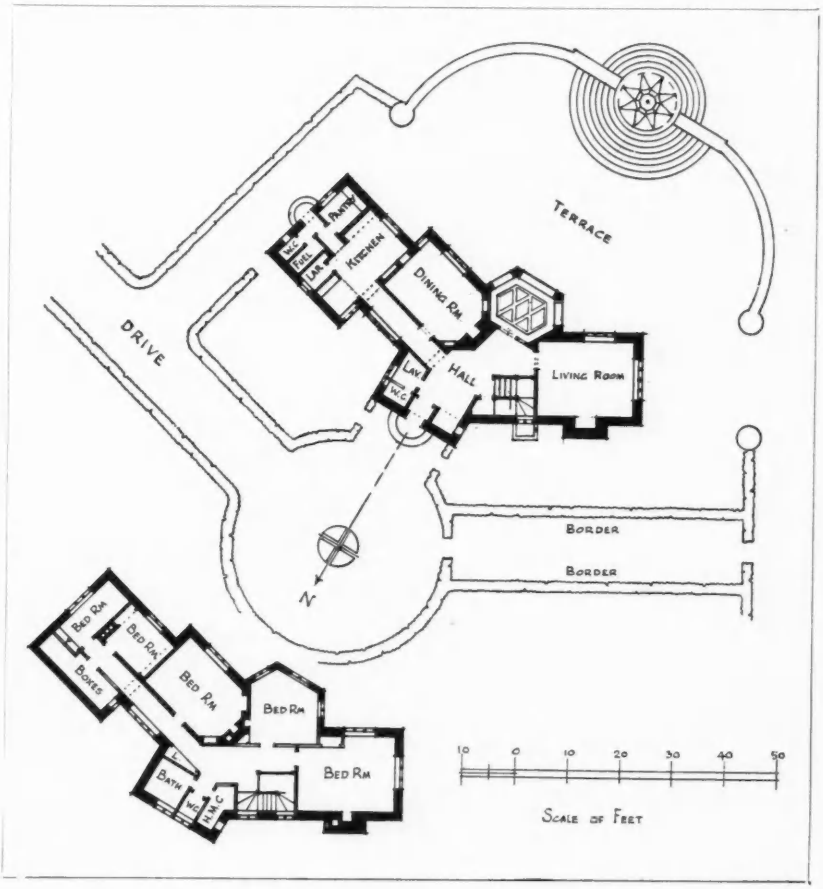
Plans passed by the BRADFORD Corporation: Six houses, Cross Road, Wibsey, for Messrs. R. J. Patchett, Ltd., three houses, Ascot Avenue, for Messrs. Ellis Balmforth and Sons; three houses, Haycliffe Grove, for Messrs. Shepherd Bros. and Brown; ten houses, St. Leonard's Grove, for Messrs. F. P. Leach and Sons, Ltd.; eight houses Briarwood Crescent, for Mr. J. A. Groves; four bungalows, Beacon Road, for Mr. T. E. Bairstow; four houses, Norman Avenue, for Mr. J. H. Smith; four houses, Hall Road, Eccleshill, for Mr. A. Sutcliffe.

Plans passed by the STRETFORD U.D.C.: Eight houses, Ruskin Road and Auburn Road, for Messrs. Smith and Allcock, Ltd.; six houses, Lime Road, for Mr. R. P. Wheeler; thirty-four houses, road off Grasmere Road, for the Suburban Building Co.; engineer's repair shop, Westinghouse Road, for the Rubber Regenerating Co., Ltd.; switchgear drawing office, fire station, and ambulance room, Westinghouse Road, for Metropolitan Vickers Electrical Co., Ltd.; stores and fitting-shed, Elsinore Road, for Messrs. Muir Hill, Ltd.; sick ward, Talbot Road, for the Royal Schools for Deaf.

Plans passed by the SHEFFIELD Corporation: Two houses, Ben Lane, for Mr. F. Lamb; ten houses, Cartmell Crescent, for Mr. J. Enock; two houses, Halligate Road, for Mr. L. J. Samuel; four houses, Herries Road, for Mr. J. Maxfield; six houses, Renshaw Road, for Mr. J. Ramsden; 148 houses, Wisewood estate, for the Estates Committee of the Corporation; four houses and garages, Greystones Avenue, for Messrs. Wm. Malthouse, Ltd.; six houses, shops, and four garages, Dixon and Wynyard Roads, for Mr. W. J. Patchett; six houses and garages, Whirlowdale Crescent, for Mr. W. W. Plant; two houses, Hoober Road, for Mr. G. M. Taylor; two houses, Sandygate Road, for Messrs. T. W. Knowles and Son; two houses, Longley Lane, for Mr. A. Oxspring; four houses, Strelley Avenue, for Mr. James Marsh; two houses, Whirlow Court Road, for Mr. Edward Walker; rebuilding Banner Cross Hotel, Ecclesall Road, for Messrs. Duncan Gillmour & Co., Ltd.; four houses, Folds Lane, for Mr. J. L. Conway; one house and shop, Cricket Inn Road, for Mr. Bowler; ten houses and garages, Whirlow Court Road, for Messrs. H. Teanby, Ltd.; vicarage, Cary Road, Manor estate, for the vicar and churchwardens of St. Swithin's Church.

Plans passed by the MANCHESTER Corporation: Projector-box, Ardwick Empire Theatre, Hyde Road, Ardwick; alterations and additions, Bridge Inn, Sandy Lane, Clayton Lane, Clayton; additions, Vale Mill, Blackley New Road and Mill Brow, Blackley; four houses and shops, Victoria Avenue and Symond Road, Blackley; seven shops and houses, Seabrook Road and Debenham Road, Newton Heath; pathology department to Royal Infirmary, York Place, Chorlton-upon-Medlock; twenty-eight houses, Balliol Street, Greenhill Road, Crumpsall; fifteen houses, Kenmere Grove, Brookside Road, Moston; 132 houses, Kingsway, Astor Road, Burnside Drive, and Grangethorpe Drive, Burnage; four shops and houses, Kingsway and Broadhill Road, Burnage; six shops and houses, Errwood Road and Shawbrook Road, Burnage; branch co-operative stores, Queen's Road and Leach Street, Gorton; alterations to bank, Mosley Street, York Street, and West Mosley Street; alterations to Hope Inn, 297 Chester Road and King Street, Hulme; cinema, Parr's Wood Road and School Lane, East Didsbury; ten houses, Ashfield Grove, Gorton; 326 houses, Moston housing estate, Moston; seven houses, Boardman Road, Albert Road, Crumpsall; printing works, Waterloo Road, Cheetham; additions to works, Blackley New Road, Blackley; fourteen houses, Meltham Avenue, West Didsbury.

Plans passed by the LEEDS Corporation: Fourteen houses, Sutherland Avenue, for Mr. G. Monkman; two houses, Water Lane, Farnley, for Mr. T. Thompson; fourteen houses, Clark Street, Clark View, and Pontefract Lane, for Mr. W. Jowitt; two houses, Stainburn Crescent, Moortown, for Messrs. Hudson and Crossfield; ten houses, Sutherland Avenue and Crescent, and Devonshire Avenue, Roundhay, for Mr. P. Snowden; two houses, Roman Avenue, for Mr. W. P. Peters; three bungalows, Water Lane, Farnley, for Mr. W. Booton; two houses, Mavis Avenue, Cookridge, for Messrs. Rea and Hall; six houses, Norton Road, Roundhay, for Mr. A. Dickinson; two houses, Park Spring Gardens, Ring Road, Bramley, for Messrs. A. Gibbs and Son; four houses, Cardinal Mount, Beeston, for Mr. K. Hainsworth; two houses, Stowe Grove, Osmondthorpe, for Mr. H. V. Waite; two houses, Stanningley Road, Armley, for Miss K. Scurrah and Mrs. L. Heal; twelve houses, Lea Farm View, Hawksworth, for Messrs. A. Braithwaite & Co., Ltd.; two houses, Foundry Lane, Roundhay, for Messrs. A. Walinets & Co.; two houses, Green Hill Lane, Wortley, for Mr. J. Thirtle; two houses, Town Street, Middleton, for Messrs. G. Gibb and A. Place; two houses, Ring Road, Middleton, for Messrs. N. Winfield and J. Winfield; two houses, Whitehall Road, New Farnley, for Messrs. Wilks and Howcroft; twenty-four houses, Church Avenue and View, Meanwood, for Mr. J. W. Broadbent; two houses, Tinshill Lane, Tinshill, for Mr. G. W. Petty; two houses, Green Lane, Cookridge, for Messrs. W. C. Little and J. Jowett; two houses, Upland Grove, Harehills, for E. Mason and H. Raisman; two houses, Green Lane, Cookridge, for Mr. R. P. Ellis; sixteen houses, Broadway and Lombard Street, Halton, for Messrs. Dunhill Brothers; twenty-four houses, Stainburn Crescent, Moortown, for Mr. E. Fish; twelve houses, Ring Road, Farnley, for Mr. F. Crawshaw; two houses, The Oval, Killingbeck, for Messrs. Purdy and Son; two houses, Cardinal Mount, Beeston, for Mr. R. R. Atkinson; two houses, Stonegate Road, for Mrs. C. Bird; two houses, Newport View, Headingley, for Mr. W. C. Wheatley; two houses, Stainburn Crescent, for Mr. R. Umpleby; four houses, Butt Lane, Farnley, for Mr. E. Marwood; two houses, King Lane and The Grove, Alwoodley, for Miss C. Mills; two houses, Harehills Lane, Harehills, for Messrs. T. Morley and Sons.



Layout, grou nd-,and first-floor plans of house in Somerset. By Eric Francis. The entrance and offices were designed to conform with a drive previously made by the owner of the ground.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A	Barnard Castle	N.E. Coast	1 7½	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A	Consett ..	N.E. Coast	1 7½	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	.....	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth	S. Wales & M.	1 7½	1 2½
	S. and E. Glamorganshire			
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1*s.* 4*d. per hour*; LABOURER, 1*s.* 4*d per hour*; NAVVY, 1*s.* 4*d. per hour*; TIMBERMAN, 1*s.* 5½*d. per hour*; SCAFFOLDER, 1*s.* 5*d. per hour*; WATCHMAN, 7*s.* 6*d. per shift.*

Broken brick or stone, 2 in., per yd.				£0	11	6
Thames ballast, per yd.				0	10	0
Pit gravel, per yd.				0	15	0
Pit sand, per yd.				0	12	6
Washed sand, per yd.				0	13	0
Screened ballast or gravel, add 10 per cent. per yd.						
Clinker, breeze, etc., prices according to locality.						
Portland cement, per ton				£2	8	0
Lias lime, per ton				2	0	0
Sacks charged extra at 1*s.* 9*d. each and credited when returned at* 1*s.* 6*d.*						
Transport hire per day:						
Cart and horse £1 3 0	*Trailer*			£0	15	0
3-ton motor lorry 3 15 0	*Steam roller*			4	5	0
Steam lorry, 5-ton 4 0 0	*Water cart*			1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick. per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete 4-2-1 in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1*s.* 4*d. per hour*; TIMBERMAN, 1*s.* 5½*d. per hour*; BRICKLAYER, 1*s.* 9*d. per hour*; PLUMBER, 1*s.* 9*d. per hour*; WATCHMAN, 7*s.* 6*d. per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½
STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1*s.* 9*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; SCAFFOLDER, 1*s.* 5*d. per hour.*

London stocks, per M.	£4	5	0
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¾ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	0	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1*s.* 9*d. per hour*; DO. *fixer*, 1*s.* 10*d. per hour*; LABOURER, 1*s.* 4*d.* per hour; SCAFFOLDER, 1*s.* 5*d. per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1*s.* 9*d. per hour*; TILER, 1*s.* 9*d. per hour*; SCAFFOLDER, 1*s.* 5*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies			£13 0 0
Countess			25 0 0
Duchess			32 0 0
Old Delabole	*Med. Grey*		*Med. Green*
24 in. × 12 in.	£42 11 3		£45 1 0
20 in. × 10 in.	31 4 3		33 0 6
16 in. × 10 in.	20 18 0		22 4 9
14 in. × 8 in.	12 1 0		12 16 3
Green Randoms, per ton			8 3 9
Grey-green do., per ton			7 3 9
Green peggies, 12 in. to 8 in. long, per ton			5 13 9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey			Med. Green		
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies, 12 in. to 8 in. long				4	13	6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square

	3	17	6
DO., machine-made do., per square	3	7	6

Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1*s.* 9*d. per hour*; JOINER, 1*s.* 9*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	4
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	3
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	9
DO. framed in floors, roofs, etc., per ft. cube	0	5	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6

PITCH PINE, add 33⅓ per cent.

FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO. 3-ply per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1½ in. thick, per yd. sup.	0	12	0
Maple 1½ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1½ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1½ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1½ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour*; MATE, *do.* 1*s.* 4*d. per hour*; ERECTOR, 1*s.* 9½*d. per hour*; FITTER, 1*s.* 9½*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour*; MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc. per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 5 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour* (*plus allowances in London only*); LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅜ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. 4 *ft. sup.* ,,	0	2	3
DO. 6 *ft. sup.* ,,	0	2	6
DO. 20 *ft. sup.* ,,	0	3	1
DO. 45 *ft. sup.* ,,	0	3	3
DO. 65 *ft. sup.* ,,	0	3	5
DO. 100 *ft. sup.* ,,	0	3	10
Rough plate, ⅜ in., per ft.	0	0	6½
DO. ½ *in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up £0 3 0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; FRENCH POLISHER, 1*s.* 9*d. per hour*; PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, per yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 3/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¼ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			⅝ in.			¾ in.		
Qualities ..	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, JULY 24

R.I.B.A., 9 Conduit Street, W. 1. Meeting of the Board of Architectural Education. "The Building of the New Horticultural Hall." By J. Murray Easton, F.R.I.B.A. **8 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "The Art Education of the Distributor." By F. V. Burridge, O.B.E., R.E. 2.30. Indian Section: "Architecture." By T. F. Wilson, F.R.S.A.I. "Persian Pottery." By Miss M. Chamot. 3 p.m. **2.30 p.m.**

LONDON SOCIETY. Motor Coach Excursion to typical London open spaces, concluding with tea at Avery Hill, Eltham. Tickets: Price 5s. each, including tea and gratuities. Return to town about 6.30 p.m. Applications to the Secretary, Lancaster House, St. James's, S.W.1. **2.15 p.m.**

THURSDAY, JULY 25

R.I.B.A. Visit to U.S.A. Day at New York. Departure at 4.08 p.m., via Baltimore and Ohio Railroad for Washington. Arrival at 9.50 p.m. Accommodation at Washington Hotel.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By Miss M. Chamot. 12 noon. "Italian Decoration." By Miss M. Chamot. 3 p.m. Lecture Theatre. "The Teaching of Colour." By H. E. Simpson. 2.30 The address will be followed by a discussion. **12 noon**

FRIDAY, JULY 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Georgian Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Eighteenth-century Wall Decoration." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

INCORPORATED INSTITUTE OF BRITISH DECORATORS. At Painters' Hall, Little Trinity Lane, E.C. Lord Stanmore opens Exhibition of Decorative Art. **7 p.m.**

SATURDAY, JULY 27

Sunrise, 5.15. Sunset, 8.57.

R.I.B.A. Visit to U.S.A. Arrival at Detroit, 8.30 a.m. Accommodation at Statler Hotel. Sightseeing by motor.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "General Tour." By T. F. Wilson, F.R.S.A.I.; "French Renaissance Art." By Miss M. Chamot. 3 p.m. "Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. 7 p.m. **3 p.m.**

SUNDAY, JULY 28

R.I.B.A. Visit to U.S.A. Arrival at Niagara Falls, 1.35 p.m. Accommodation at Clifton Hotel.

MONDAY, JULY 29

R.I.B.A. Visit to U.S.A. Departure from Niagara Falls at 11.25 a.m. via electric car, connecting at Lewiston with steamer across Lake Ontario. Arrive at Toronto at 2.45 p.m. Accommodation at King Edward Hotel.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Seventeenth-century Furniture." By Miss M. Chamot. Lecture Theatre. "Art and the Press." By Charles Marriott. 3 p.m. **3 p.m.**

TUESDAY, JULY 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Art Schools and the Preservation of the Countryside, Ancient Buildings, etc." By Clough Williams-Ellis, M.C., F.R.I.B.A. 2.30. "Later English Furniture." By Miss M. Chamot. 3 p.m. **2.30 p.m.**

WEDNESDAY, JULY 31

R.I.B.A. Visit to U.S.A. En Route Montreal, passing Thousand Islands. Arrival at Montreal 5.45 p.m. Accommodation at Windsor Hotel.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. Discussion to be opened by F. W. Burrows, M.H.I., on "The Qualities and Duties of Art School Head Mastership." **2.30 p.m.**

THURSDAY, AUGUST 1

R.I.B.A. Visit to U.S.A. Motor sightseeing in the city of Montreal. Departure for Quebec via Canadian National Railways at 5.10 p.m. Arrival at Quebec 9.55 p.m. Accommodation at Chateau Frontenac Hotel.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Pottery." By L. O. Faraker. "Tudor and Jacobean Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Stained Glass." By T. F. Wilson, F.R.S.A.I. 3 p.m. Lecture Theatre. "Modernism in Art." Lantern Lecture by Alfred H. R. Thornton, M.A. 2.30. "Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon.**

FRIDAY, AUGUST 2

R.I.B.A. Visit to U.S.A. Motor tour from Quebec to the famous shrine of Ste. Anne de Beaupre, returning by way of Montmorency Falls. Embark in evening on s.s. "Ascania."

SATURDAY, AUGUST 3

Sunrise, 5.26. Sunset, 8.46.

IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY, Imperial Institute Road, South Kensington, S.W.7. Exhibition of Royal Society of Arts Competition of Industrial Designs, 1929. Open daily until September.

SUNDAY, AUGUST 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Gifts through the National Art Collections Fund." By Miss E. M. Spiller, O.B.E. 2.45 p.m. "Beauty of Colour." By Miss E. M. Spiller, O.B.E. **4 p.m.**

MONDAY, AUGUST 5

Bank Holiday.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. 12 noon. General Tour. By L. O. Faraker. "English Furniture." By T. F. Wilson, F.R.S.A.I. 3 p.m. General Tour. By L. O. Faraker. **12 noon.**

WEDNESDAY, AUGUST 7

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.1. Indian Section: "Architecture." By Miss M. Chamot. **3 p.m.**

THURSDAY, AUGUST 8

VICTORIA AND ALBERT MUSEUM, South Kensington. S.W.7. "Architecture." By L. O. Faraker. 3 p.m. "Recent Acquisitions." By Miss M. Chamot. **7 p.m.**

FRIDAY, AUGUST 9

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. **12 noon.**

SATURDAY, AUGUST 10

Sunrise, 5.37. Sunset, 8.33.

R.I.B.A. Visit to U.S.A. s.s. "Ascania" due to arrive at Plymouth.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. 12 noon. Indian Section: "Sculpture." By Miss M. Chamot. 3 p.m. **12 noon.**

SUNDAY, AUGUST 11

R.I.B.A. Visit to U.S.A. Arrival of s.s. "Ascania" at London.

MONDAY, AUGUST 12

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Furniture (1)." By Miss M. Chamot. 12 noon. "English Furniture (2)." By Miss M. Chamot. 3 p.m. **12 noon.**

TUESDAY, AUGUST 13

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Sculpture." By Miss M. Chamot. 12 noon. "English Primitives." By Miss M. Chamot. 3 p.m. **12 noon.**

SATURDAY, AUGUST 17

Sunrise, 5.47. Sunset, 8.20.

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, Excursion.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By L. O. Faraker. 3 p.m. "Italian Renaissance Furniture." By L. O. Faraker. **7 p.m.**

MONDAY, AUGUST 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. "Spanish Architecture and Sculpture." By Miss M. Chamot. 12 noon. "Spanish Textiles and Pottery." By Miss M. Chamot. 3 p.m. **12 noon.**

TUESDAY, AUGUST 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Tapestries." By Miss M. Chamot. 3 p.m. **3 p.m.**

WEDNESDAY, AUGUST 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Stained Glass." By Miss M. Chamot. **12 noon.**

THURSDAY, AUGUST 22

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Renaissance Furniture." By L. O. Faraker. "Etching." By Miss M. Chamot. **7 p.m.**

FRIDAY, AUGUST 23

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By Miss M. Chamot. 12 noon. "Byzantine Art." By Miss M. Chamot. 3 p.m. **12 noon.**

SATURDAY, AUGUST 24

Sunrise, 5.58. Sunset, 8.5.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Eighteenth Century Furniture." By L. O. Faraker. 7 p.m. "Italian Decoration." By Miss M. Chamot. 7 p.m. **7 p.m.**

MONDAY, AUGUST 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By Miss M. Chamot. 12 noon. "Northern Sculpture." By T. F. Wilson. 3 p.m. **12 noon.**

WEDNESDAY, AUGUST 28

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Arts and Crafts." By T. F. Wilson, F.R.S.A.I. 3 p.m. **3 p.m.**

THURSDAY, AUGUST 29

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. 3 p.m. **3 p.m.**

FRIDAY, AUGUST 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By L. O. Faraker. 12 noon. "Chippendale." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

SATURDAY, AUGUST 31

Sunrise, 6.10. Sunset, 7.50.

A.A.S.T.A. Summer Tour to the Rhineland via the Ardennes and the Moselle. From the evening of August 31 to September 8 or 12.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Furniture of the Seventeenth Century." By L. O. Faraker. 12 noon. "English Furniture of the Eighteenth Century." By L. O. Faraker. 3 p.m. Indian Section. "Mogul Art." By T. F. Wilson. 3 p.m. "Eighteenth-century Furniture." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon.**



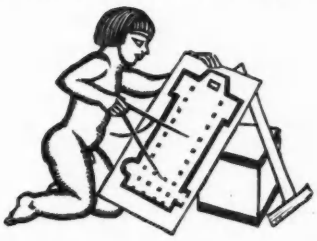
CHARING CROSS BRIDGE: A VISION OF 1949.

This is a photograph of an imaginative scene out of a British film now under preparation by the Gaumont Company, and shows the architecture of London round and about Charing Cross Bridge twenty years hence, as visualized for that purpose by Mr. Andrew Mazzei.

Various old landmarks, such as the Houses of Parliament and the London County Hall, will be recognized, but a strange metamorphosis has overtaken many of the buildings. The artist has evidently counted on very rapid developments during the next couple of decades. A new Southern Railway terminus has arisen upon the south bank of the Thames, and we see a Charing Cross Bridge in being. Such changes are now practically assured, though the form of their final resolution is still uncertain. What is perhaps more dubious is the development of traffic in the air to such an extent that some of the larger blocks of premises, particularly those fronting the open-air space provided by the River, are provided expressly to give flat roofs adapted for the landing and departure of aeroplanes.

Something of the kind is, however, inevitable whether it comes twenty, fifty or a hundred years hence, and in the leading article on the facing page an attempt is made to peer into the future and consider what will be the conditions of life for which architects will be compelled to plan.

THE ARCHITECTS' JOURNAL



WEDNESDAY, JULY 24, 1929

ARCHITECTURE OF THE FUTURE

"If this be error and upon me proved,
I never wrote—"

SHAKESPEARE'S *Sonnets.*

OUR artist friend, on the page facing this, has taken the tendencies of today as the basis of his "London in twenty years' time." This seems a logical thing to do. The increase in mechanical transport by road, water, and air, the development of the herd instinct through life in hotel and flat, and the consequently greater height of buildings, and the preservation of old buildings as historic witnesses; all these are shown in the picture with the utmost clearness.

Aeroplanes flutter about as common as two-seaters, perch on and take off from hotel roofs, airships hover over the scene, (and presumably anchor themselves to the flagstaff on the Imperial Chemicals palace,) buildings facing open spaces like the Thames are constructed of enormous size, yet the Houses of Parliament and the Abbey are carefully preserved.

The changes depend, however, on every furnace and fire eating its own smoke, so that the aeroplanes may see to land on the proper building, and not deliver unwilling gate-crashers to Lady Smarterly's. And, further, there must be the strictest limitation, not of families, but of cities, to prevent a worse traffic problem in the air than on the streets.

Let us attempt a more detailed forecast of the conditions for which architects may have to legislate. London, in due course, though not in twenty years, will contain only a tenth of its present population, the remaining nine-tenths having been distributed in new cities throughout the Empire. Canada will receive four-tenths, Australia three, South Africa and Kenya one each. Constant communication by air, wireless, and television will be maintained between these great cities so that all in a sense remain London, and the whole Empire will realize its interdependence. Similarly a part of Glasgow will be located in the Highlands, and the deer forests will be repopulated by the crofters.

The fertility of the soil, not only of Scotland, but of the whole world, will be increased by electric treatment and cheap patent manures. Great Britain will be self-supporting in food. Indeed, the rush back to the countryside, in order to exploit the new conditions, will need a strong Government to control it, in spite of so many acres having been taken by the Exchequer in payment of death duties. The Government will succeed in maintaining the old villages unspoilt, but provided with adequate water and sanitation.

New villages on the old models, each with a church, school, co-operative store, and mill, will be planned and built, and here will live the majority of agriculturists, small tenants of the Crown. Those who prefer town life can live far away, and fly to their work, for there will be perfect freedom in these matters.

In nothing will there be a greater change than the esteem in which manual labour is held. Whereas philosophers have recognized for some time that the whole nature of man ought to be developed, and that to work entirely in factories, or entirely in the sun, or all day in an office, is prejudicial, this idea will become popular with all classes. Consequently, most people of their own initiative will spend a part of each day in both manual and brain work, both under cover and in the open air. The smaller unit of the city and the dispersal of the population throughout the Empire will make this a practical thing.

Great belts of trees, with undergrowth for bird sanctuaries, will take the place of such desolations as Golders Green, Barking, and Raynes Park. Bird sanctuaries will be planted round the churches, whose steeples are seen in the background of our picture.

The architecture of main streets will be less blatant than today, when advertisement is increasing the violence of its appeal, only because its authors will know they are in a death struggle with all that is decent and comely. Already the most thoughtful tradesmen realize that over-emphasis is losing its effect; something more simple brings custom their way. The suggestion of a shop front should be quality not quantity. Similarly the most astute hotel keepers ask for elegance from their architects, and will pay for the subtlest design and the best work and materials, since they cater for well-mannered people rather than rich vulgarians. The ostentatious hotel of the picture is merely a sop thrown to the large barbaric clientele of the movies. Building in cities will be orderly, and the differences will come from the varieties of use; architecture will have realism and urbanity.

NEWS & TOPICS

ARCHITECTS, CLIENTS, AND FEES

IN spite of protestations to the contrary, it cannot be denied that the rendering of an architect's account to a private client is attended by feelings of diffidence and delicacy, be they worthy or not. What is probably the most satisfactory method of dealing with the matter came to my notice in a letter in the editorial post-bag emanating from a client and to be printed, I believe, elsewhere in this issue. It is agreed that to expect the client to pay a proportion of the architect's account with every builder's certificate imposes an unjustifiable burden upon the client's time, but if a note of the proportion of fees, purely for the information of the client, accompanies each certificate, and payments of fees are arranged to be sent quarterly up to the end of the job, the client knows not only how the fees accrue, but in what regular proportion they must be paid. This, I say, is a satisfactory and sensible method, but I still see a world of clients for whom I am prepared to adopt new methods, human nature being what it is.

*

BRINGING EXCITEMENT TO GARDEN CITY LIFE

Garden city existence is an acquired taste to which working-class families, and especially those such as miners transplated from other districts, have to be educated. Newly-formed village communities on country sites find themselves isolated from most things that brought comfort to their old condition: lights, shops, cheap amusements, and the interest of crowded streets. Not only are these things denied them, but because of their occupation as workers in factories and mines, their lives lack the variety and character of agricultural workers, and their unity as employees at one factory or mine is a gulf setting them apart from the country life by which they are surrounded. Small wonder that they find life moving too slowly for them, and prefer to travel greater distances to and from their work if they may yet live in the cheerful, crowded conditions of the town.

*

In the Kent coalfields, where the theory of the self-supporting mining town, placed in purely rural surroundings, has been put into practice, it is felt that this discontent will vanish as the growing population makes possible the provision of cinemas, more shops, and a greater general fullness of life. From my own experience of a garden village, placed within easy reach of a town, I know that the better conditions of life made possible by wise planning are fully appreciated; it is only the excitement that is lacking. It is the excitement that has dragged villagers into the towns from time immemorial; and when we come to think of it, does it not keep us here, too?

*

SCULPTORS, ARTISTS, AND "THE MISTRESS ART"

How is it that architecture today finds so little work for artists and sculptors? A good deal of correspondence has been exchanged on the responsibilities of the State to living artists, but it has been pointed out by Sir C. J. Holmes, sometime Keeper of the National Portrait Gallery, that if the State does little, architects do less, and that to claim for architecture the title of "Mistress Art," as Sir Reginald Blomfield does, is vainglory, and without the substantiation of fact. What contribution have artists and sculptors made towards the decoration or adornment of the great banks, the official headquarters, the hospitals, town halls? As good as none. Is it not true that the most eminent architects today are content to accept decoration, carving, and sculpture as it comes from the shops of business firms whose duty it is to turn out what seems to please? Tell me where, in the rich City of London, I may find mural decorations that will stir me? Where is fine sculpture to be found?

*

It might be rather depressing to reflect on the state of unpreparedness and lack of *rapport* that was responsible for (I think it must be admitted) the comparative failure of the sculpture on the new Underground building materially to reinforce the artistic content of the whole. The failure is by no means complete, however, and the Underground building *is* more interesting than any other building of the year, and to some extent because of the sculpture.

*

The point I wish to make is this: that architects considered as a whole take no interest in artists and sculptors; give them no encouragement; do not trust them; and are at no pains to help them by educating clients to accept their work in the form of mural decoration or sculpture.

*

BRITISH SCULPTORS' SILVER MEDAL

I see that Mr. Charles L. Hartwell's sculpture, "The Goatherd's Daughter," now on view at Burlington House, has been adjudged "the best work of the year by a British sculptor in any way exhibited to the public in London," and as such takes the R.B.S. silver medal. Mr. Hartwell, himself a Fellow of that Society, and a Royal Academician, was born some fifty-six years ago, and is an instructor in his chosen art to several City companies. Two well-known pieces of his are the marble bust of the Prince of Wales, cut for the Newcastle - upon - Tyne Mansion House war memorial, and one of Charles Darwin, a copy of which was recently acquired by Japan for the Tokio Exhibition. The illustration succeeds, as well as any single picture of a piece of sculpture may, in conveying the gracious, flowing lines of this quiet essay.



"The Goatherd's Daughter." Mr. C. L. Hartwell's sculpture at the Royal Academy, which has won him the silver medal.

SLUM CLEARANCE BY ACT OF PARLIAMENT

Opinions at Westminster may vary as to the wisdom of the course taken by the Government in continuing the Wheatley subsidy at its present level, but on one matter there is general agreement, and that is that the House of Commons will have an unusually busy autumn session. Mr. Greenwood, the Minister of Health, in elaborating the Government's plans, mentioned that the continuance of the Wheatley subsidy was merely in the nature of emergency legislation until he could introduce the Government's "comprehensive" scheme for dealing with slum clearances and for providing more houses to let. This scheme is likely to come before the House of Commons in the autumn, and it is rumoured that some of its provisions are to be of a far-reaching nature. It will be interesting to watch the duel between Mr. Greenwood and his predecessor in office, Mr. Chamberlain. Mr. Greenwood favours the creation of more tenants; Mr. Chamberlain pins his faith to a nation of "owner-occupiers." It is to be hoped that, between the two, the building industry will not once more be plunged into a state of uncertainty.

*

AN INTERNATIONAL MEDICAL "WORKSHOP"

When I saw the illustrations of the London School of Hygiene and Tropical Medicine in THE ARCHITECTS' JOURNAL last week, I became filled with the desire to examine this great new institution; to see whether architecture really could meet the exacting demands of the medical profession and supply a structure that would be worthy of, and, what is more important, suitable for, carrying on the research and other international work for such a diversity of interests. My misgivings were dispelled when I saw the building during the opening ceremony by the Prince of Wales last Thursday. Briefly, it is in two main divisions, the first comprising all the rooms required for public use, such as the museum, the library, and the lecture theatre; and the other, the accommodation required for research and teaching departments, including the big laboratories, workshops, and animal quarters. The committee, director, and staff have continuously urged the view that the building is to be regarded in the main as a workshop, and this has been the keynote of the design of the architects, Messrs. Verner O. Rees and P. Morley Horder. It is a workshop in which all the parts are appropriate for their use, durable and lasting in construction, and in proportions exactly related to the whole. With this in mind it follows that any ornamentation would be superfluous except in the rooms intended for public use and for the functions and meetings to be held here.

*

MEN AND INSECTS

The Keppel Street façade has been designed as a deliberate frontispiece to the whole institution, with sculptural decoration to define more precisely the nature of the work to be undertaken. A frieze, bearing the names of many early pioneers in hygiene and tropical medicine, runs along the upper part of the frontage and forms a homage to their achievements. The balconies of the large first floor windows are enriched with the gilded bronze insects, the carriers of tropical diseases; and on the main entrance is carved the allegory, which is an adaptation, from the school seal—a Greek coin engraved with the figures of Phœbus and Diana bringing light and health to the distressed inhabitants of a malaria-ridden town in Sicily.



A sixteenth-century arch in the City: St. John's Gate, Clerkenwell, once the entry to a priory, and later a private residence.

*

A SURVIVAL AT CLERKENWELL

St. John's Gate, Clerkenwell, of which I give here an illustration taken from a photograph dated some fifty odd years ago, is happily one of those architectural and antiquarian survivals which London still possesses. It is, too, among the few specimens of the architecture of the sixteenth century which the Great Fire spared us. The gate was erected in 1504, by Sir Thomas Dockwra, Grand Prior of the Order of St. John of Jerusalem, as an entrance to the priory. After the Dissolution, the property passed into private hands, and in 1604 Sir Roger Wilbraham is found occupying the gateway buildings as a private residence. But it was in the eighteenth century that it was to spring into a fresh renown as a literary centre. For here, until his death in 1754, Edward Cave, the well-known publisher lived and carried on his activities. One of the most famous of these was the establishment of *The Gentleman's Magazine*, the first number of which, bearing the well-known woodcut of the gateway, was issued in 1731.

*

WELDING FOR STEEL-FRAME BUILDINGS

A large steel-frame building just erected at Niagara Falls was put together without a single rivet. In place of the rattle of mechanical riveters, gas welding was carried on in comparative peace, and 297 tons of structural steelwork was erected by men without previous experience of welding. Riveting is not so much of a nuisance here as in America, where skyscrapers, in the first place, occasion a great deal of riveting, and are, in addition, built in the close quarters of already built-up districts where the noise of the hammer reverberates on the cañon faces of the surrounding buildings.

ASTRAGAL

EXTENSIONS TO THE FIRST WOMEN'S HOSPITAL

DESIGNED BY SIR BRUMWELL THOMAS

The Elizabeth Garrett Anderson Hospital was the first in the Empire to be staffed by women for women. Founded 1866 by Doctor Elizabeth Garrett Anderson to enable women to consult doctors of their own sex, it was opened as a dispensary with four beds in a small house in Seymour Street. Nine years later it was transferred to two houses in the Marylebone Road and enlarged to twenty-six beds, and in 1890, Doctor Elizabeth Garrett Anderson moved the hospital to its present site in the Euston Road. The New Hospital for Women (as it was called) was opened by Her late Majesty, Queen Alexandra, then Princess of Wales, with forty-two beds. In 1918 the committee changed the name to the Elizabeth Garrett Anderson Hospital in memory of the founder.

On pages 124 and 125 are illustrated the ground- and first-floor plans of the new Queen Mary's wing, the old building which has been reconstructed, and the proposed new additions which include a War Memorial Hall.

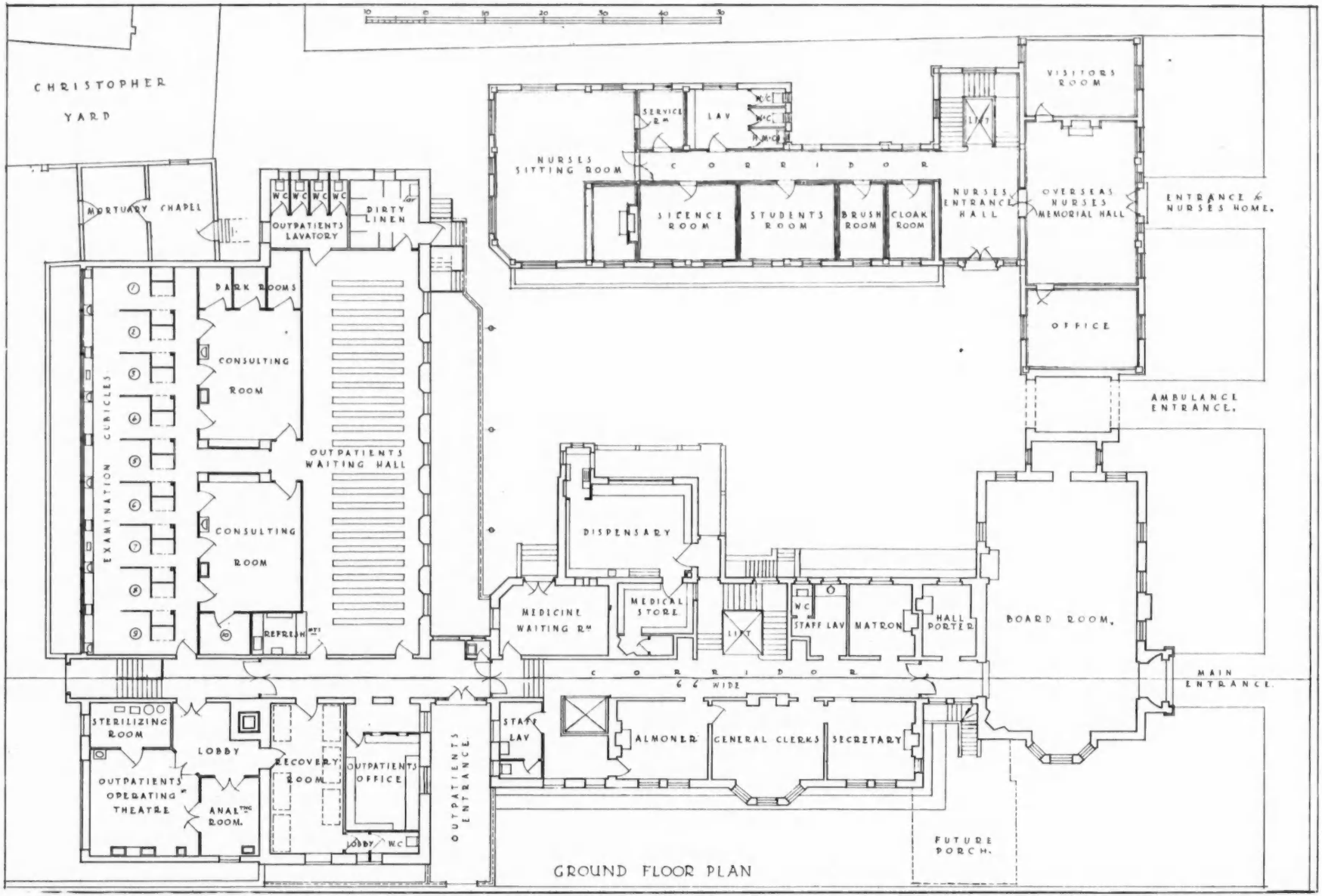


A view of the new Queen Mary's wing to the Elizabeth Garrett Anderson Hospital from Churchway. Ultimately the hoarding will be removed and a new entrance erected to the design shown in the architect's detail drawing, reproduced on the facing page.

[By Sir Brumwell Thomas.

A detail of the semicircular-headed window in Churchway, and part of the architect's drawing of the elevation. The window lights the six-bed ward shown in the left-hand corner of the first-floor plan on page 125. The new wing was opened recently by the Queen. As soon as strength permits, patients are removed to the Rosa Morrison House of Recovery, New Barnet.

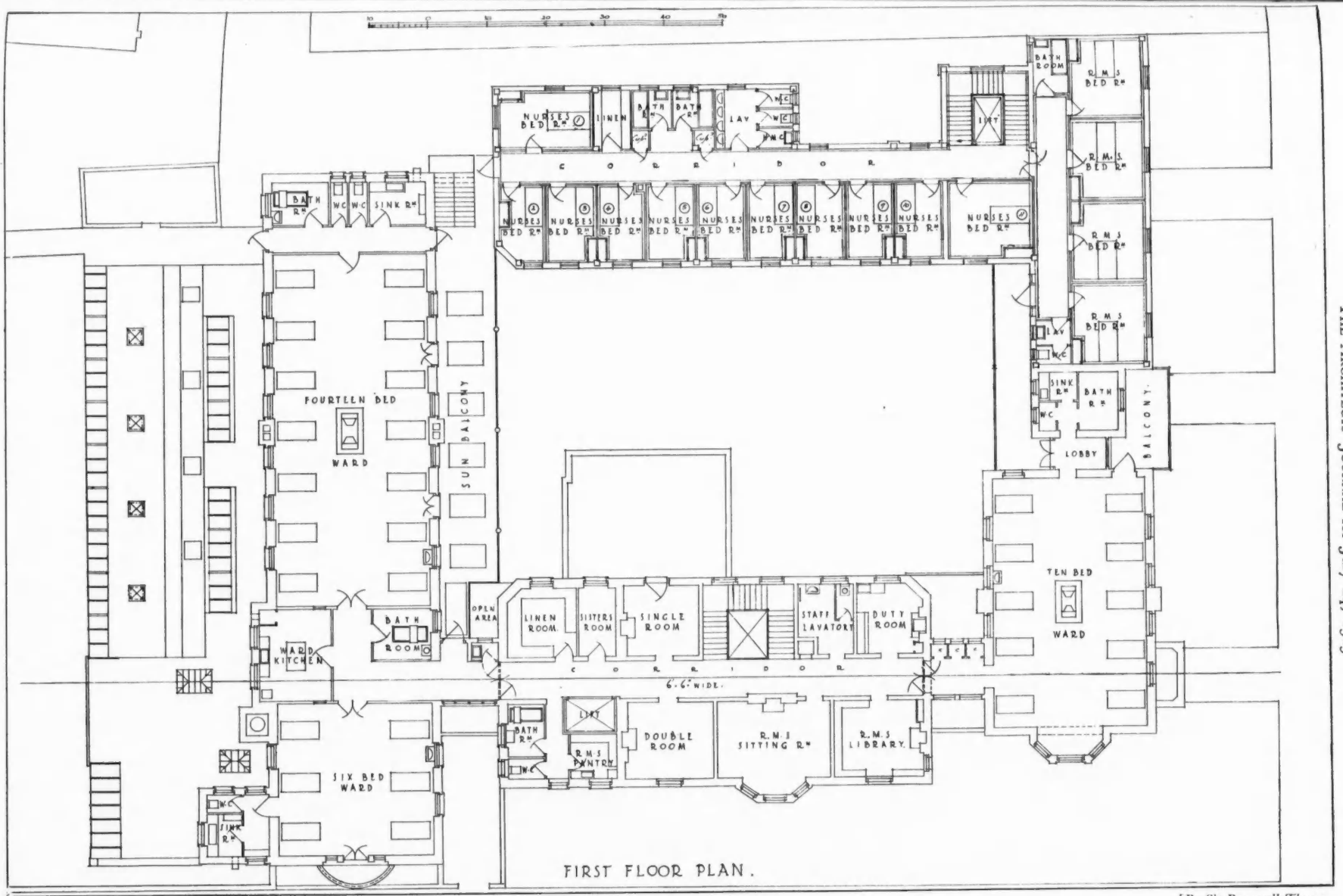
Queen Mary's Wing, Elizabeth Garrett Anderson Hospital, N.W.]



Elizabeth Garrett Anderson Hospital, N.W.] [*By Sir Brumwell Thomas.*

The ground- and first-floor plans reproduced on this and the facing page give a general idea of the accommodation now existing, and that to be provided in the future. The old building, which has been reconstructed; extends from the board room on the Euston Road front right side of drawings to the staff lavatories on the Churchway side. Beyond this, in Churchway, is the Queen Mary's wing, and beyond the board room in Euston Road will be erected the proposed new nurses' home, etc., plans of which are shown.

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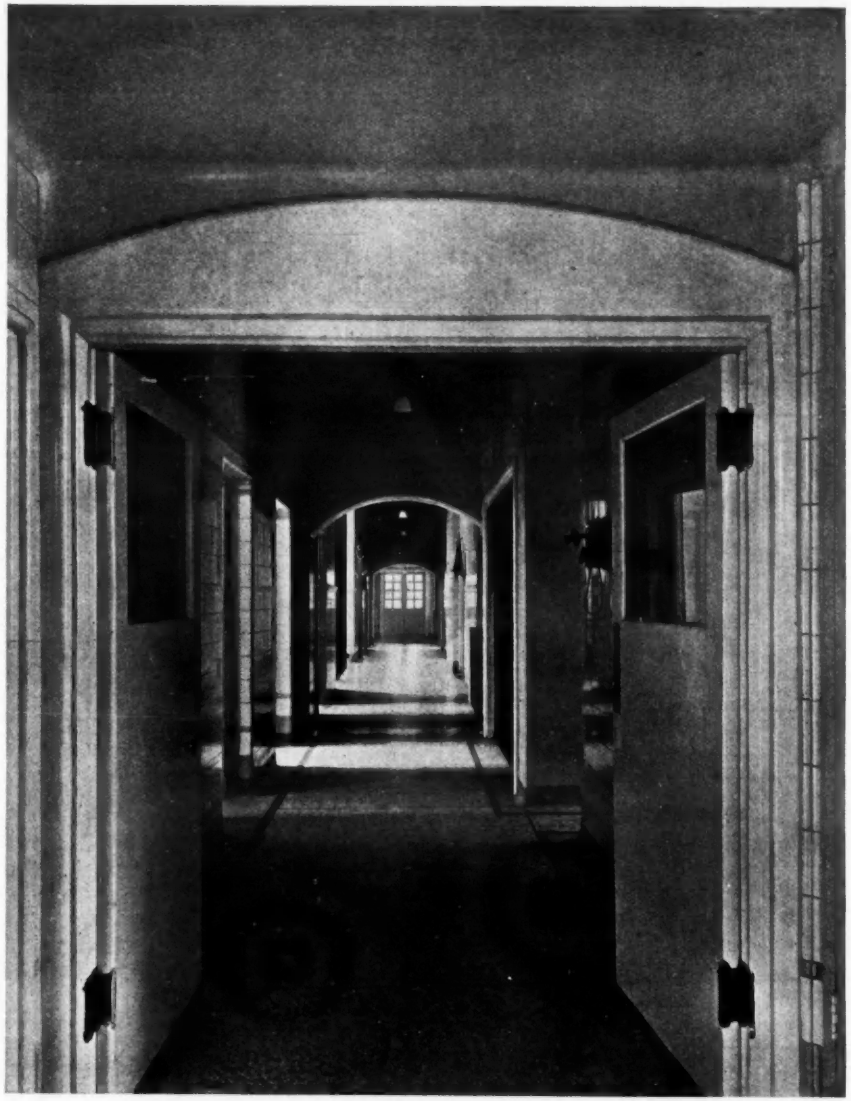


Elizabeth Garrett Anderson Hospital, N.W.] [*By Sir Brumwell Thomas.*

The first-floor plan of the Queen Mary's wing; the old building which has been reconstructed; and the proposed new nurses' home, etc. The Queen Mary's wing provides an X-ray department, an enlarged out-patients' department with its own operating theatre, two new operating theatres, surgical and medical wards with sun balconies, a maternity department, and a children's ward.

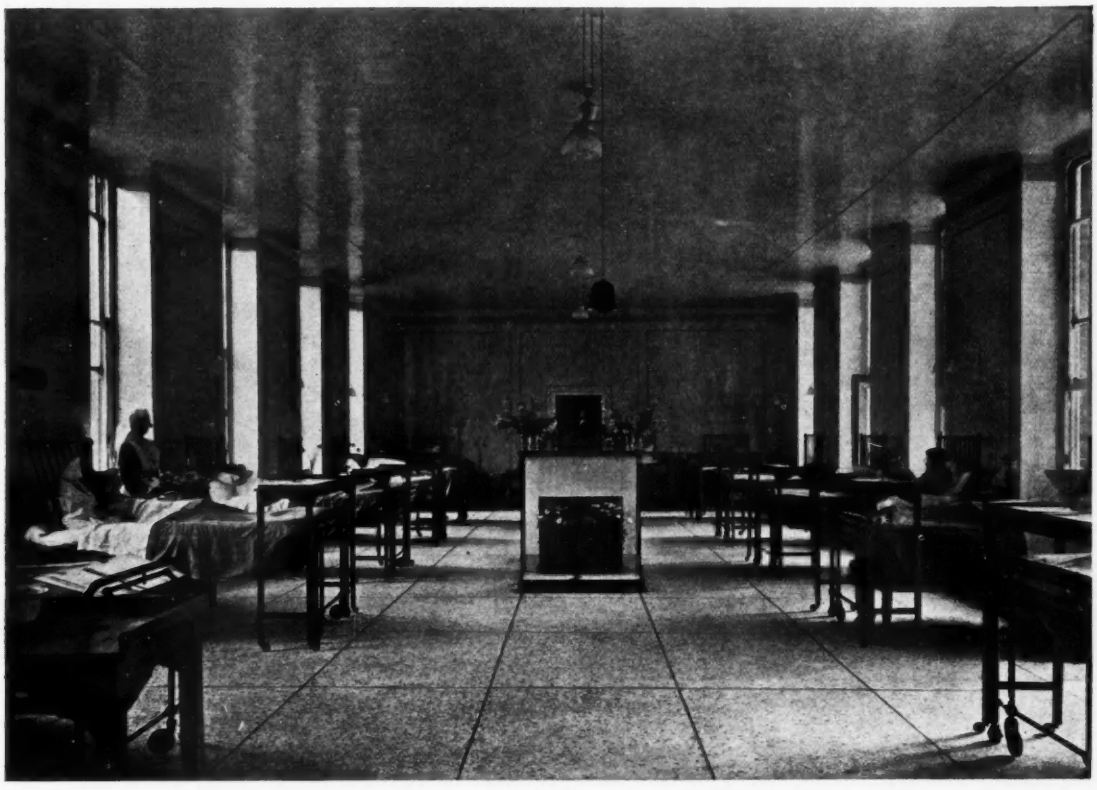


Queen Mary's wing, Elizabeth Garrett Anderson Hospital, N.W.]



[*By Sir Brumwell Thomas.*

The examination cubicles, and a corridor on the first floor. The cubicles are an important feature of the outpatients' department, and ensure the strictest privacy for the patients. As will be seen from the ground-floor plan on page 124 there are nine cubicles. Each one is made self-contained by the use of curtains and has its own undressing-room.





Queen Mary's wing, Elizabeth Garrett Anderson Hospital, N.W.] [*By Sir Brumwell Thomas.*

The Dame Louisa Aldrich-Blake ward, and the outpatients' operating theatre, looking towards the sterilizing room. The hospital was founded by Elizabeth Garrett Anderson in 1866. Dame Aldrich-Blake, after whom this ward was named, was a senior surgeon and one of its many devoted friends.



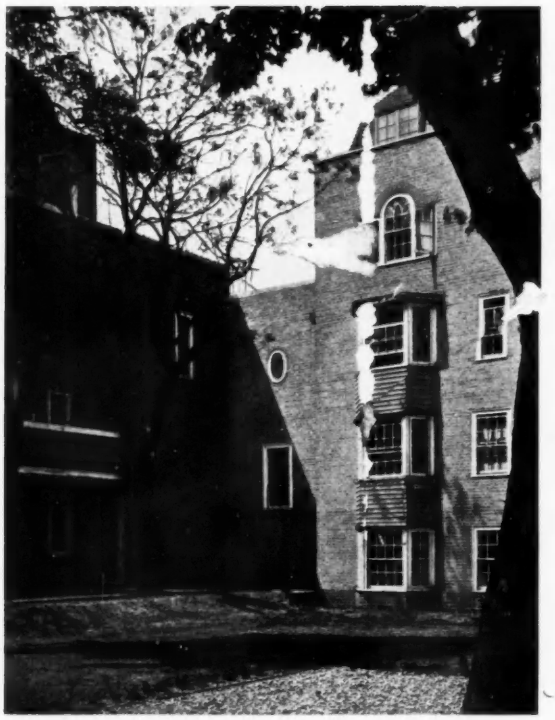
The first section to be completed, with frontages to Albion Road. Larkhall Rise, intersecting it at right angles, runs up the slope to the left, in a westerly direction.

LARKHALL: THE NEW COLONY OF FLATS AT CLAPHAM

DESIGNED BY LOUIS DE SOISSONS AND G. G. WORNUM

Today Mr. Neville Chamberlain will visit the Larkhall Estate to lay a stone commemorating the inception of this scheme of flats, which, when complete, will house, in spacious conditions, within a mile of Vauxhall Bridge, 4,500 people, some three times the number displaced by the demolitions involved.

THE Larkhall Estate occupies a roughly rectangular area of about 30 acres, bounded on the north by Wandsworth Road and on the south by Larkhall Rise. A layout of the whole has been prepared, providing for the erection of blocks of flats on a total of 5 acres, plus 4 allocated to roads, leaving no less than 21 for open spaces and gardens. But only the first 6 acres have yet been taken in hand by the public utility society concerned. These represent a strip, running north and south, down the westerly extremity of the estate, and served by Albion Road, which divides this developed portion from that lying to the eastward, at present occupied by small villas.



A corner in one of the courtyards, showing, on the left, the beginning of a typical balconied front, and, on the right, one of the bay-window features, with oak weather-boarding.

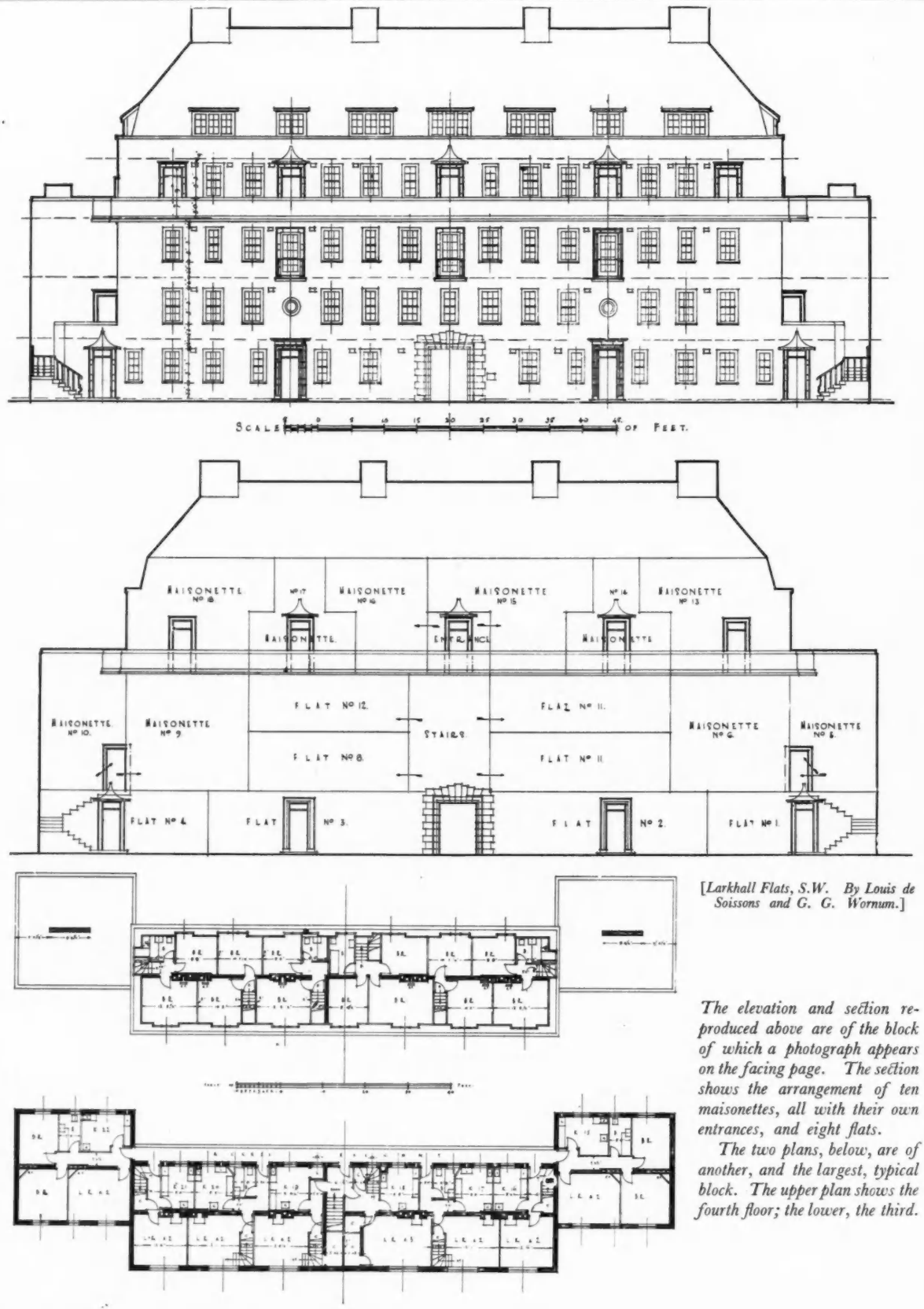
On it, sixteen blocks are disposed around the sides of five courts. As the illustrations will show, two distinctive types of elevation have been employed, with slight modifications in view of aspect, etc., linked up by flat-roofed wings. They contain over three hundred flats and maisonettes, of which more than two-thirds are already let at rentals ranging between £95 and £130 per annum, inclusive of various services, such as garden upkeep, cleaning of staircases, and constant hot-water supply. The flats are of from two to five rooms, with kitchen and bathroom. Every block has a separate name: Mordaunt House, Leslie House, etc.

The impression of spaciousness—though in point of fact

Larkhall Flats, S.W.]

In the first court, showing the inner sides of the blocks at the corner of Albion Road and Larkhall Rise, illustrated from the road at the head of this article on page 128. Dutch bricks of a light tone are employed, pointed with white cement and sand; the dressings are of artificial stone, the roofs of hand-made, sand-faced tiles. The cast cement decorative panels are by Gilbert Ledward. Window woodwork in the lower stories is painted light cream, with greyish green for the dormers. Doorway frames are emerald green, and doors bright blue,

[By Louis de Soissons and G. G. Wornum.



[*Larkhall Flats, S.W. By Louis de Soissons and G. G. Wornum.*]

The elevation and section reproduced above are of the block of which a photograph appears on the facing page. The section shows the arrangement of ten maisonettes, all with their own entrances, and eight flats.

The two plans, below, are of another, and the largest, typical block. The upper plan shows the fourth floor; the lower, the third.

some three times the former population is to be comfortably housed on what was almost a "crowded" area—is largely due to the adoption of the quadrangle principle of planning. Aided by the presence of old trees, that have been retained wherever possible, there is something of the air of an Inn of Court about these new buildings. The intrinsic attractions are enhanced by grass lawns, flagged paths and terraces, and beds of bright flowers, planted in masses, varied as between court and court.

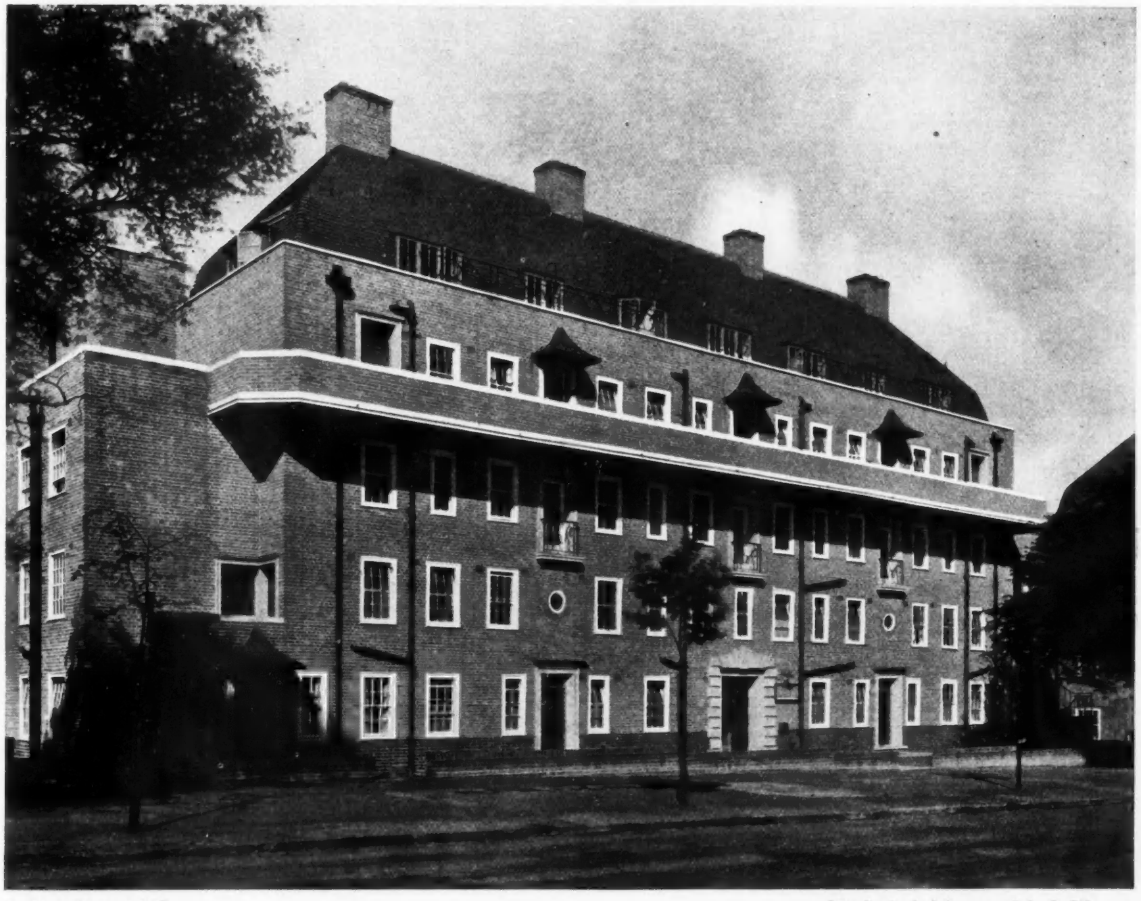
The blocks are five floors high and only one flat deep, so that all principal rooms have an outside aspect either to the south or west; there is no looking out on to blank walls in interior wells. Character is imparted to both the alternative types of elevation; in the one case by horizontal balconies at third-floor, and sometimes also at first-floor level, and in the other by vertical bay-window features, in oak weather-boarding, the tone of which blends very effectively with the silvery brickwork.

The wood windows, some of sash, and some of casement type, are painted light cream in the case of all but the dormers, which are grey green. All the front doors are painted bright blue, while the frames are emerald green. The metal hoods to the individual doors of flats and maisonettes are also painted green.

Enough has been said to show that, in this scheme of Sir Theodore Chambers, something very definite has been done to cater for the needs of people of moderate means who are sensitive to their conditions of living. The reason why it is assured of success lies in the fact that, instead of the problem being nibbled at, it has been boldly faced and visualized on a large scale. Even the area already redeveloped is large enough to establish and maintain a character of its own against an environment none too favourable; as a consequence, the value of surrounding property has already shown a distinct upward tendency.

The experiment of taking so large an area as 30 acres, so near the heart of London, as the unit, was only possible because the leases on the greater part of the property fell in shortly after the war. Difficulties in obtaining possession naturally arose under the Rent Restriction Acts, but by 1926, by tact and persuasion, all the old houses but one, which became the subject of an application to Court, passed peacefully into the hands of the new owners. Demolition at once began, and a start was made on the erection of the new buildings.

The entire scheme is anticipated to cost £240,000. The development has been undertaken by way of a society registered under the Industrial and Provident Societies' Acts, with dividends limited to 6 per cent. per annum. Neither the L.C.C. nor the Government provided any subsidy, but the L.C.C. arranged loans on every block of flats for forty years, equal to 90 per cent. of their value.

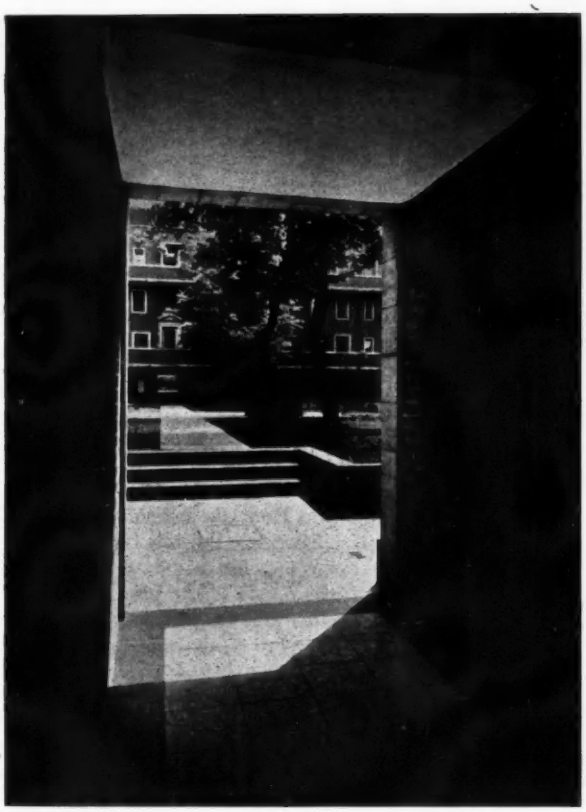


Larkhall Flats, S.W.] [*By Louis de Soissons and G. G. Wornum.*

A near view of the block at the south-easterly corner of Albion Road. The balcony provides separate entrances for every maisonette on the third floor. From the central entrance stairs give access to the flats in the intervening floors.

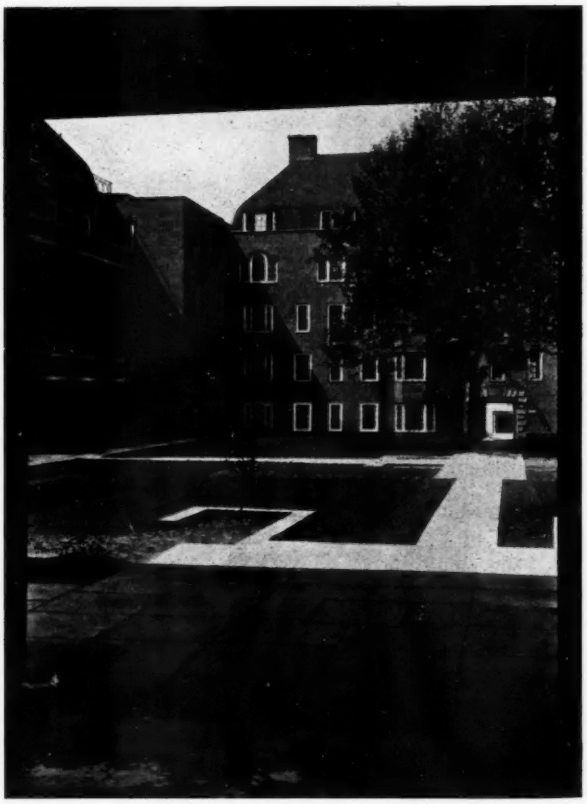


The spacious character of the scheme is indicated by this view; only five of the thirty acres of the estate are to bear buildings, and every care has been taken to preserve the many old trees on the site. The blocks, left and right, show typical alternative elevations employed throughout.



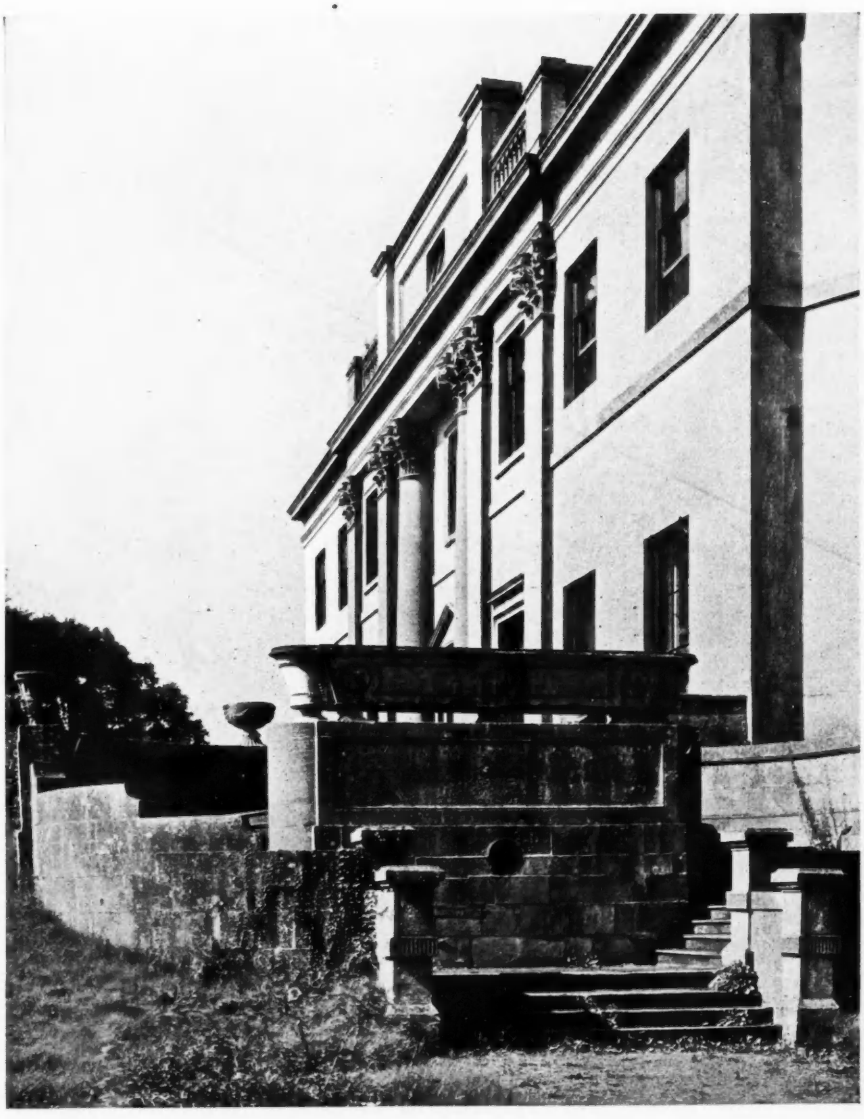
Larkhall Flats, S.W.]

A glimpse, through an entry, across a court, of which five, surrounded by buildings, are included in the first or westerly section.



[By Louis de Soissons and G. G. Wornum.

Another courtyard view, showing the rising ground laid out with lawns, flagged terraces, and brick retaining walls.



ENGLISH PRECEDENT No. 74

DODINGTON PARK: STEPS FROM TERRACE TO GARDEN.

Though of small parts, there is no doubting the true monumental nature of this unusual composition of steps. The combination of urns with tank or sarcophagus is one of a series of refinements upon a theme which encompasses grandeur in little space. The design, though it has all the firmness that the central mass can give it, is full of the movement of the steps. It is complex in the best sense of the word; a mine of information to a careful student.—[E. MAXWELL FRY.]

ARCHITECTS' FEES

When Should Accounts be Rendered?

In recent issues the views of a number of prominent architects on the delicate question of procedure in the matter of rendering accounts to clients for their fees have been published. The correspondence arose out of a comment by Karshish in the instalment of "The Honeywood File" in the issue of June 19. There is another side to it—the client's. This is set forth in one of the letters below.

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—On the point of "payment of fees," one soon comes to learn that clients are of two types, those who pay, and those who don't. Experience develops an unerring instinct in this all-important matter; and a wise architect naturally takes care that the just are not penalized for the unjust. As your correspondents point out, the provisions of the R.I.B.A. schedule of charges, discreetly used, point the way of wisdom. There are other points in which one seems to detect a survival of the Victorian mentality in your contributor. I find it difficult to believe that even a young architect would, in these days, handle a reputable contractor in the manner of Mr. Spinlove. If he did, I think he would deserve more than the latter is getting. I am old enough to remember when things were done in that manner; and also to have realized that times and business methods have considerably changed.

Also, with an experience largely restricted to the barbarous North, I entirely fail to recognize in Mr. Fred Bloggs the type of a modern builder's foreman—such as I am nowadays accustomed to encounter.

CHARLES M. HADFIELD

A Client's View

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—As a client who has recently had experience in the delicate matter of fees, and who, although a layman, is enjoying to the utmost the delightful "Honeywood File," I should like to be permitted to point out one or two matters which are possibly overlooked when this question is considered chiefly from the aspect of the professional man.

The client knows, of course, that the architect has eventually to be paid his fees, and, I think, more often than not, is somewhat anxious as to how such payments should be remitted. He may not be *au fait* with what is accepted as customary, for it is possibly his first experience of building, and although the regulations issued by the R.I.B.A. may have been placed in his hands for perusal, the list of fees is somewhat difficult of comprehension to the uninitiated. The client usually has it in mind, I should say, that sooner or later the architect will render some sort of an account and then the matter will be clear, or will be open for discussion in a friendly way.

So much for the client's general attitude.

But the work progresses, certificates for the builder are presented and paid. Yet there is no word from the architect about his side of the matter. This, in the early days, is only slightly worrying—for the financing of a constructional work is always, I think, a worry—but as time goes on and one extra after another is added to the work, while numerous alterations have also been adopted, the client's anxiety becomes more pronounced.

He cannot expect an estimate for every alteration and extra; time would be wasted, and, moreover, he is assured by his professional man that "everything will be measured up eventually and can only be charged out fairly and properly" (whatever this may mean).

The client sees the architect hard at work all the time; he is at the building giving his best, solving all sorts of problems, instructing various kinds of men, sketching roughly how he wishes some particular little detail of work to be carried through; coming for "a few minutes only" and finding it impossible to get away under several hours, and so on.

In other words, the client has very real evidence of the labours of the architect and appreciates the fact that the drawings and designs he has inspected are simply the preliminaries to the architect's heavy work on the site. Meanwhile those extras are mounting up; and he feels perfectly certain that the fees he originally faced for the architect will be considerably increased. And then, suddenly, he remembers that while the builder has had goodly sums on certificates, the architect has as yet had nothing!

Ought he to say something? What is the architect expecting? Is it the client's part to suggest a remittance? Is it correct to expect an account?

However, other pressing matters arise to put such questions out of mind, until the day, possibly just after paying out a considerable sum to the builder on a certificate, the client at last receives "a note of fees to date" from his architect. The item is a large one and, coming just on top of the payment under a certificate, it assumes exaggerated proportions in the client's mind. But it must be paid at once, for the architect has had no cheque as yet. It is an item for immediate attention, no matter how inconvenient.

Now I would set out, Sir, that from the client's point of view it would have been far better if some business arrangement could have been made with the architect right at the start of the contract for definite sums to be paid to him at stated intervals. A friendly talk on this subject between client and architect after the contract has been signed should be possible; and if the architect could say: "My fees on this work will be about so much and if it suits you I think a cheque for so much each quarter would suit me. Then at the end I will render you a proper account of fees and we can have a clearance at your convenience," all the false delicacy and difficulty of the position would then disappear.

The client, from the outset, would see his architect's fees as part and parcel of the outlay; the amounts he has to meet would be small in comparison with the sum in the long-delayed account; and there would be no special prominence given to this item as is the case when the account comes in suddenly and has been a matter of uneasy speculation on the client's part.

I would suggest that the attitude which architects generally take, as revealed by the correspondence on this subject in your paper, is based upon a false conception of the client's mind; that it is far more the result of a dislike to discuss such matters as fees on the part of the architect himself than anything else. The architect desires the fees, they are his reward for his labours, and they are well and hardly earned, I should say, from my own experience as a client. There is no reason for any delicacy other than that governing such matters when dealt with between gentlemen. The client knows he will have to pay his architect, and is glad to have the advantage of his professional assistance and advice. It is to the architect's advantage to recognize this and to take care that undue prominence is not given to the payments to be made to him, by the adoption of methods which may be founded on nice feeling, but are likely to involve him in a false position through a false awkwardness that exists only in his own mind.

The surgeon has no hesitation in naming his fee for an operation and, moreover, he generally likes to have it before the patient is placed on the operating table.

A RECENT CLIENT



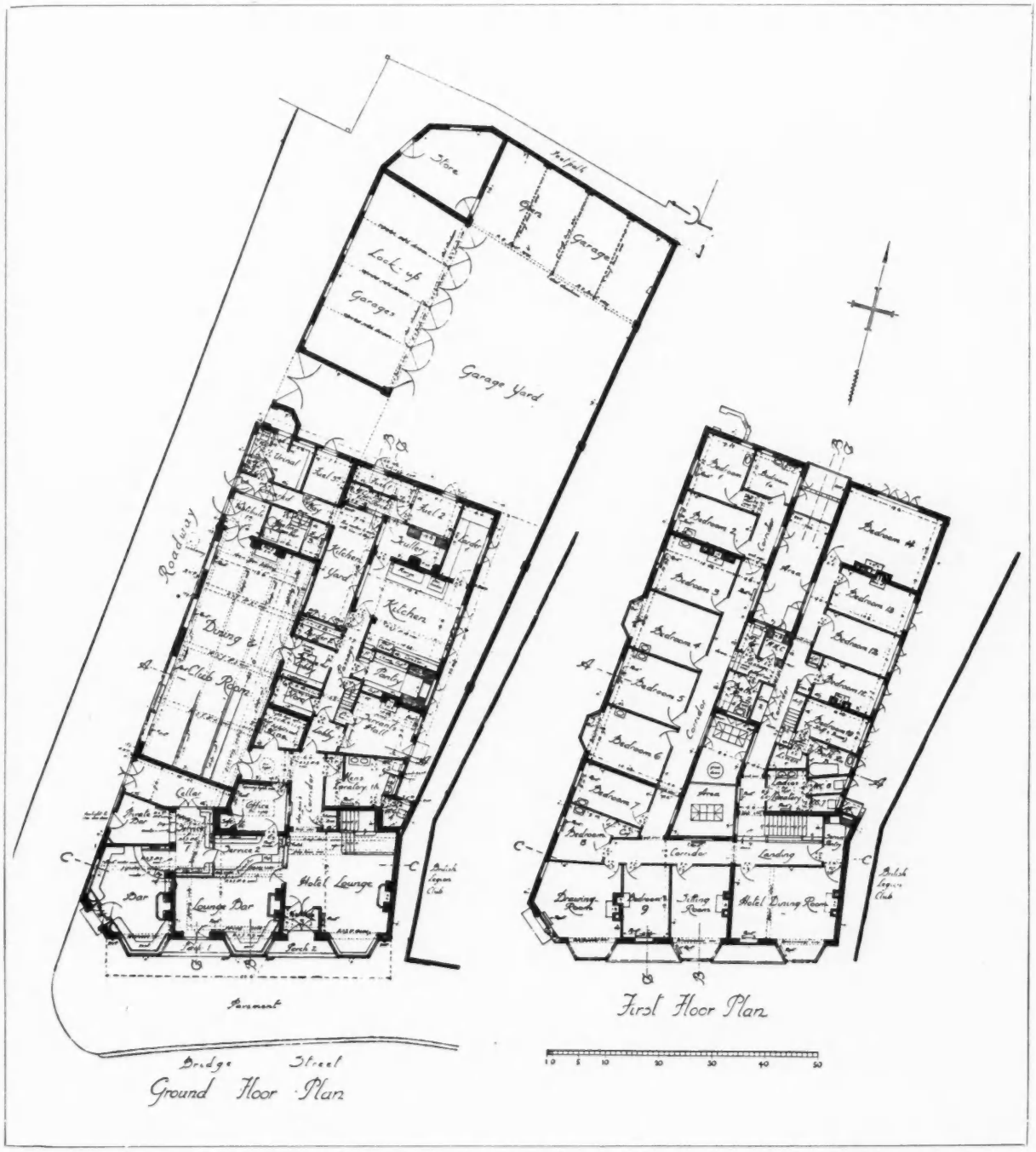
The main front of the Crown Hotel, erected on the site of the Crown Inn, an ancient hostelry in Bridge Street, on the main Bath road through Maidenhead. The bar, lounge bar, and hotel lounge are entered from Bridge Street.

CROWN HOTEL:

DESIGNED BY

The new Crown Hotel, designed in a simple Georgian style, is one of the most recent improvements on the main Bath road through Maidenhead. In rebuilding the old Crown Inn, the object of the owners, Messrs. Dymore, Brown and Son, was to erect a first-class hotel to meet the demands of residents, visitors, and the greatly increasing travelling public. Externally the building is faced with hand-made, sand-faced, dark red, multi-coloured bricks. The main roofs are covered with red tiles largely obtained from the old building.

The entrance to the hotel leads into a comfortable lounge which has an oak block floor, and a ceiling decorated with fibrous plaster in high relief. A wide oak staircase leads from the hall to the hotel dining-room, &c., on the first floor. The entrance doorway to the lounge, the corner entrance to the

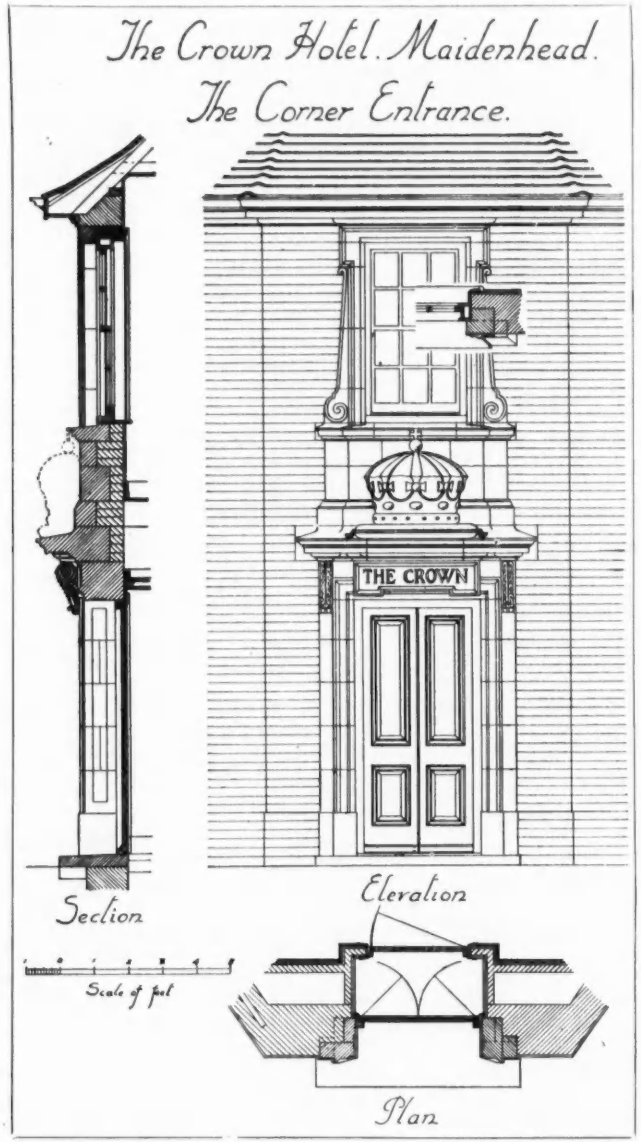


The ground- and first-floor plans. Outstanding features are, on the ground floor, the large dining- and club-room, and the lock-up and open garages at the rear; on the first floor the compact planning of the bedroom accommodation.

MAIDENHEAD

WILLCOCKS AND GREENAWAY

saloon bar, and the dressings to the window above it, have been carried out in Hartham Park stone. Surmounting the saloon bar door is a crown of painted copper made by Mr. Herbert Maryon, of Reading University. Austrian oak has been used extensively throughout the building for panelled walls, dadoes, etc., and in the bars for counter and service fittings. A vaulted corridor leads from the hotel lounge to the large dining- or club-room, which has an oak spring dancing floor and oak dado, the wall above the dado being relieved with plaster panels. The ceiling is panelled and enriched with fibrous plaster in high relief. The latest systems of central heating and domestic hot-water supply have been installed throughout the building; all the chief bedrooms being fitted with lavatory basins. The bathrooms have tiled walls and rubber floors.



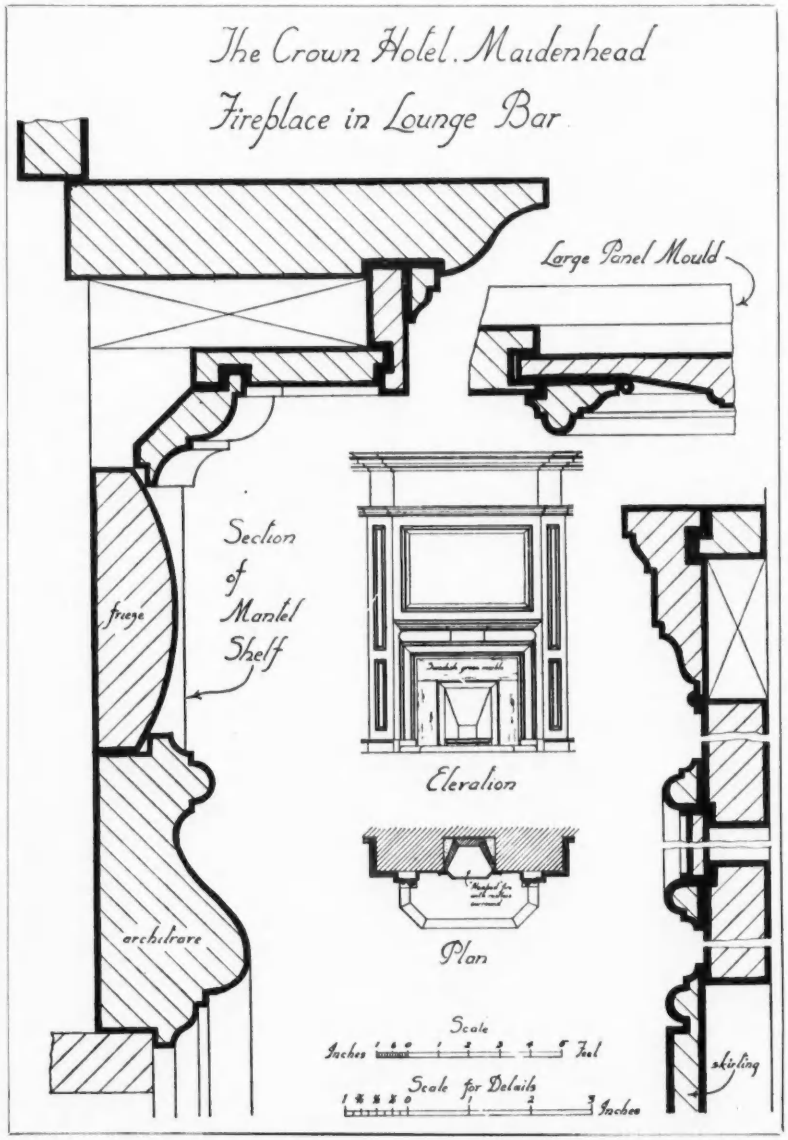


Crown Hotel, Maidenhead.] [By Willcocks and Greenaway.

The corner entrance to the saloon bar, shown in the accompanying architects' working drawing and photograph, is executed in Hartham Park stone, the crown sign, surmounting the door, being of painted copper. The walls of the building are faced with deep red hand-made, sand-faced bricks of varying colours, with rough buff joints and stone dressings.

The corner entrance to the saloon bar, shown in the accompanying architects' working drawing and photograph, is executed in Hartham Park stone, the crown sign, surmounting the door, being of painted copper. The walls of the building are faced with deep red hand-made, sand-faced bricks of varying colours, with rough buff joints and stone dressings.





Crown Hotel, Maidenhead.] [*By Willcocks and Greenaway.*

The fireplace to the lounge bar, shown in the photograph and drawings, is carried out, as regards the grate itself, in rustless steel, set in a surround of Swedish green marble. The carved mantelpiece is of Austrian oak, and the walls of the room are panelled throughout, the ceiling being decorated with fibrous plaster.

SHADOW PROJECTION

A Holiday Course for Architectural Students: viii

BY JOHN M. HOLMES

This week's diagrams are again concerned with the shade and shadows of various irregular forms invented to illustrate the application of methods described in previous instalments. Once more only typical points are indicated by letters, to point the way for the student to draw out for himself, in detail, the complete shadows of the forms.

Diagrams 16-17: Spherical, Cylindrical, and Conical Forms with their Shadows Cast on Curved and Flat Surfaces; Shadow of an Irregular Edge on Steps.

DIAGRAM 16

Elevation Shade and Shadows

The dividing line commencing at A and ending at B in the elevation is obtained on spherical and cylindrical forms as described in diagram 10 (instalment vi) and diagram U (instalment iii), and on the cone as described in diagram V (instalment iii). The cast shadow of the cone on the left is obtained by projecting identical points in its dividing line in plan and elevation on to the two appropriate plan circles of the main cylindrical form. Points C, D, E, and F, with their shadows at CS, DS, ES, and FS, are examples. The right edge of the shadow is slightly concave and the left edge slightly convex. The cast shadow of the dividing line GH on to the surface of the sphere on the right is readily found in plan as the straight line JK. The points J and L on this line in plan are identified as points JE and LE^1 and LE^2 in elevation. Two further points, ME^1 and ME^2, in the elevation shadow line are projected from where the plan line JK cuts the auxiliary horizontal slice circle MXY in plan at M.

Plan Shade and Shadows

The plan shade and shadow of the cone are obtained as in diagram V (instalment iii); the plan shade of the dome and of the sphere, as in diagram 10 (instalment vi). The part of the shadow NS—OS is that of the circular edge NO in elevation, on to the dome surface. Further points in the curve NS, OS, may be obtained by slicing, as will be shown in a future diagram 23 to larger scale.

Shadows on Background and Foreground

The shadows on background and foreground may be found by the direct projection of points in the dividing line in plan and elevation through the *XY* line. In casting the shadows of cylindrical and spherical forms, a more rapid method is that described in diagrams 9 and 10 (instalments v and vi). Any part of the dividing line already projected on to the elevation or plan of the form cannot be projected on to background or foreground. Thus the contour GH in elevation will play no part in the outline of the shadow on the background or foreground, for its shadow has already been projected on to the sphere. The background shadow is made up of overlapping ellipses cast from a series of spherical forms and discs. These are constructed in appropriate rectangles and parallelograms as described in diagram 10 (instalment vi). Only small parts of the plan circles play their part in the outline of the shadow in some cases, e.g. the edge QP in plan and elevation is identified at PS—QS in the elevation shadow.

DIAGRAM 17

To cast the elevation shadow of the edge A B C D E F, which is a dividing line, on to the surface of the steps, it is necessary to obtain a section in order to determine which part of the steps will receive the shadows of the salient points in the line. Lines at 45 deg. are drawn from the top and bottom of each step up to the line A B C D E in the section producing points 1, 2, 3, 4, etc. Horizontal lines are drawn through each of these numbered points on to the front elevation. The shadow line is found by a series of lines at 45 deg. drawn to the edges of appropriate steps in front elevation.

Examination of the section will show that the dividing line changes direction at points E, C, and B, and that the shadows of points E and C fall on the plan surfaces and the shadow of point B on the elevation surface. The horizontal level of point BS in section is drawn to the elevation, and plan lines showing the relative positions of E and C are drawn in the plan at ES—ES and CS—CS. Points B, E, and C are in turn projected on to these lines, B in elevation, and C and E in plan. The shadow line changes its direction at these three points and is drawn through them. The shadow line in the elevation is obtained from the section; the shadow line in plan is projected downwards from the elevation.

The shadow of the right side of the form is cast on to the plane represented by the *XY* line for purposes of comparison.

(To be continued)

R.I.B.A. INTERMEDIATE EXAMINATION

The intermediate examination qualifying for election as student R.I.B.A. was held in London from June 14 to 20, and in Manchester and Newcastle from June 14 to 19, 1929. Of the 145 candidates examined forty-nine passed and ninety-six were relegated. The successful candidates are as follows, the names being given in order of merit as placed by the examiners:

Wright, F. W.	East, T. W.
Edgar, N.	Elgar, S.
Tweddell, N.	Forbes, H. J.
Midgley, R.	Gardham, H. E.
Smith, W. C. B.	Graham, K.
Hassel, G. F.	Harrison, G. H.
Darbyshire, L.	Hawkard, C.
Steel, A. J.	Jackson, C. H.
Watson, R. P.	Kain, W. C.
Conolly, H.	Lowe, W. L.
Barrow, T. J. D.	M'Intyre, D.
Wood, C.	Mollison, W.
Toy, C. G.	Oatley, J. W.
Mastin, H.	Powys, I.
Woolley, F. E.	Rex, L. H.
Waters, A. B.	Simmons, C. H.
Robinson, A	Smith, C. B.
Dow, H. E.	Stewart, A. A.
Chard, F. V. S.	Thompson, J. S.
Allen, W. H.	Turner, A.
Thompson, W.	Turner, J. W.
Barnes, J. W. H.	Walker, R.
Bland, K. W.	Williams, C. P.
Cardwell, J. J.	Wright, R. H.
Cooper, A. W.	

Belfast will be an additional centre for the R.I.B.A. intermediate examination provided that at least five candidates for examination at that centre are forthcoming on each occasion.

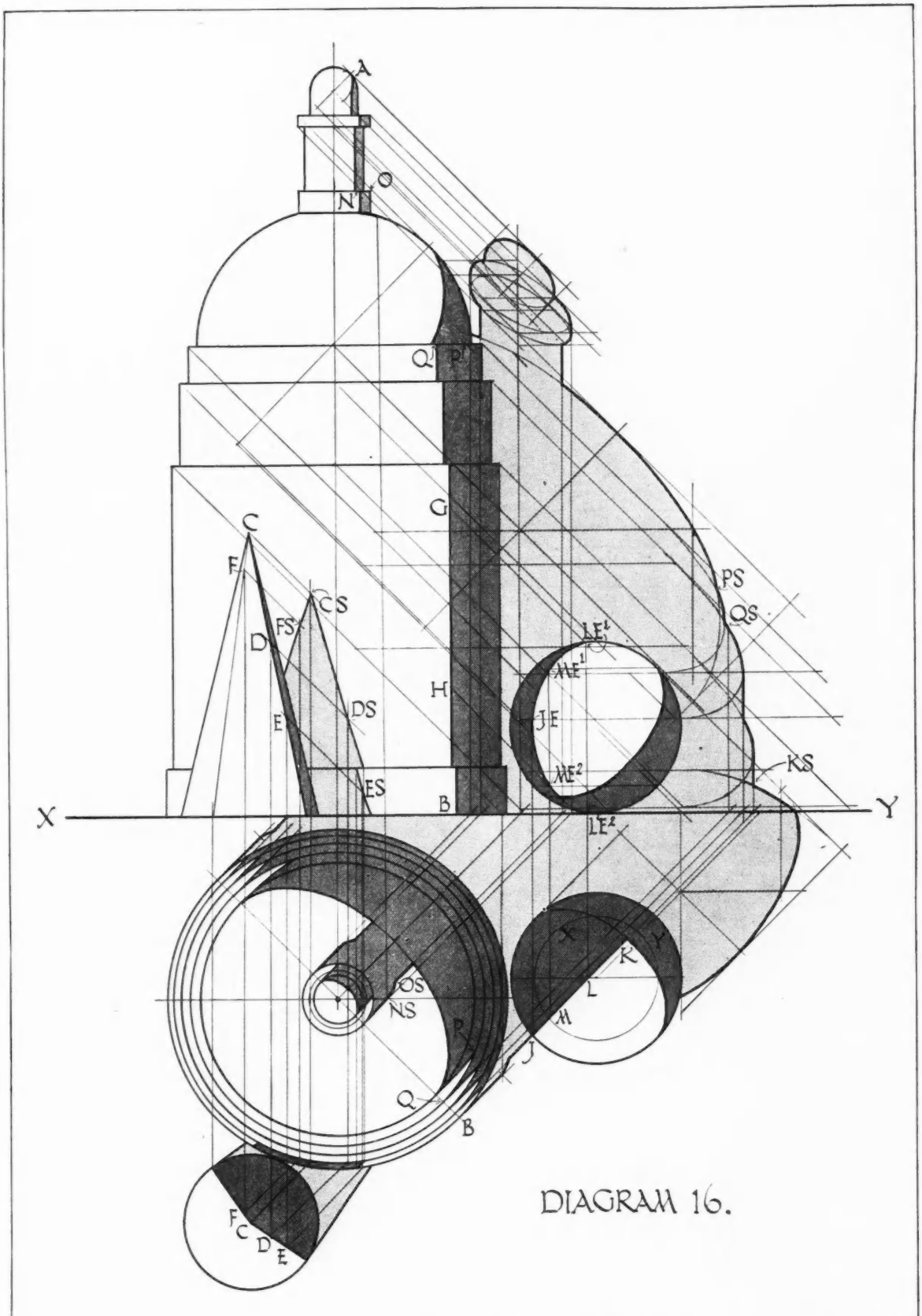


DIAGRAM 16.

Shadow Projection.] [*By John M. Holmes.*

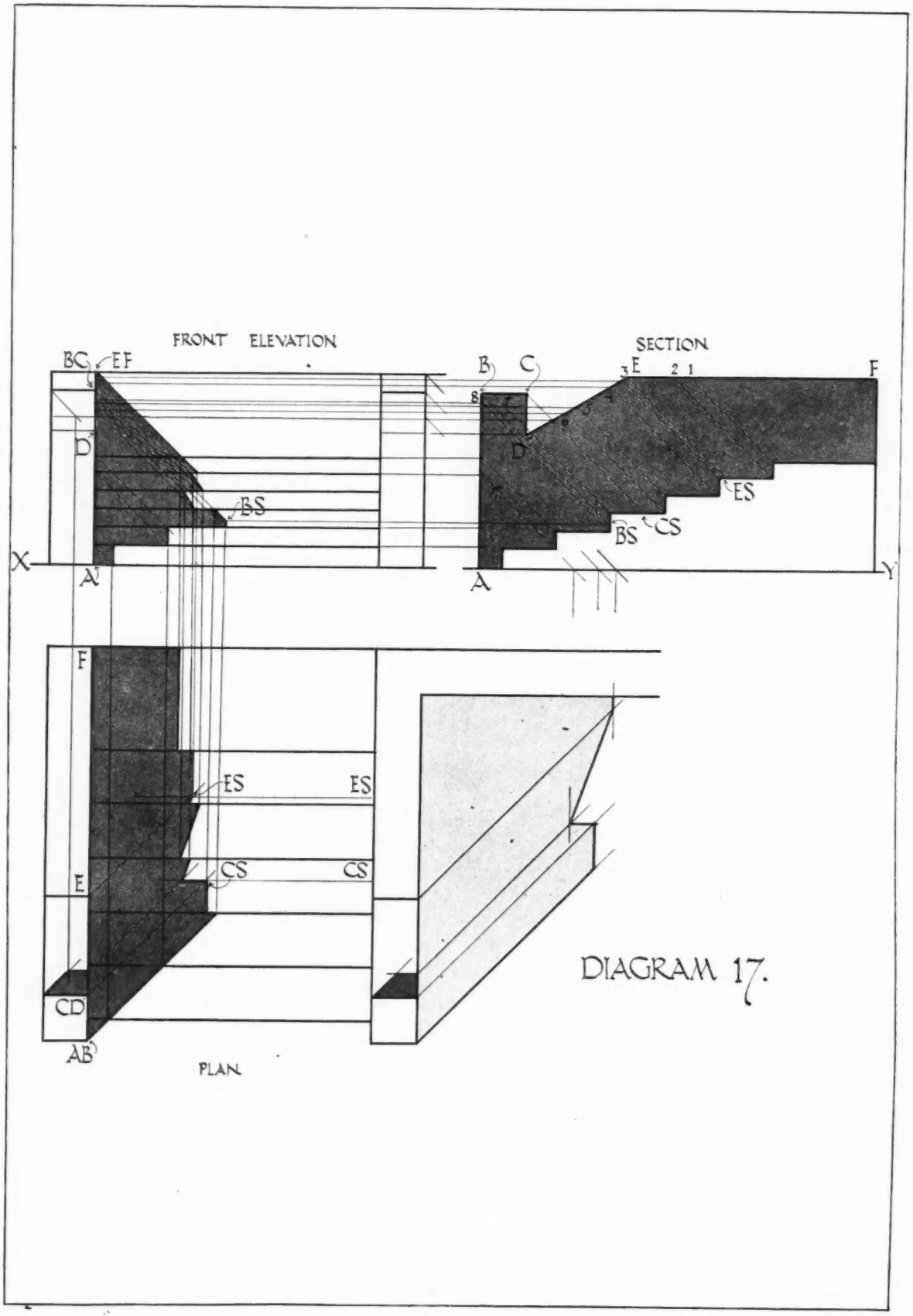


DIAGRAM 17.

Shadow Projection.] [*By John M. Holmes.*

LITERATURE

THE NEW INTERIOR DECORATION

This is as beautifully produced a book as one is led to expect from the house of Batsford, and the literary side of it is excellently written, but the sad part is that the writers only seem to know of the work of a small number of painters and a few of their foreign contemporaries. This narrow horizon gives the book a suburban atmosphere, since little of the more important modern work in England is included, and much that is has a distinctly "arty and crafty" atmosphere, showing a lack of thoroughness. However, dismissing the idea that it is not all representative of modern work, the book is very entertaining and collects many plates that one has seen scattered over periodicals into one volume, which, though it may not instruct, is a good record of a certain small section of workers.

The Continental section shows all that is newest of that simple form that is attendant on one's bodily life, though there is nothing that can really appeal to the intellectual or æsthetic sides. The rooms shown are designed to sit in, to sleep in, and to eat in, but not to be nice in. They are distinctly brutal and lack that charm that is required by people of average taste and sentiment, who form the major portion of the inhabitants of this world.

When one turns to the British section it is a surprise to find no illustrations of the work of Charles Mackintosh, whose decoration was the inspiration of so much Continental work, and much of which, though done some thirty years ago, is as "modern" as any shown in the book. He is not even mentioned. In fact, modern British decorators are ignored entirely.

Their place is taken in the book by some decorative painters of that school that is not fussy, and is content to paint over doors, mantelpieces, and walls, the designs of which cannot be accepted as good. The artists seem to imagine they disappear when stridently covered, even as during the war ships were camouflaged with splodges of colour to conceal them.

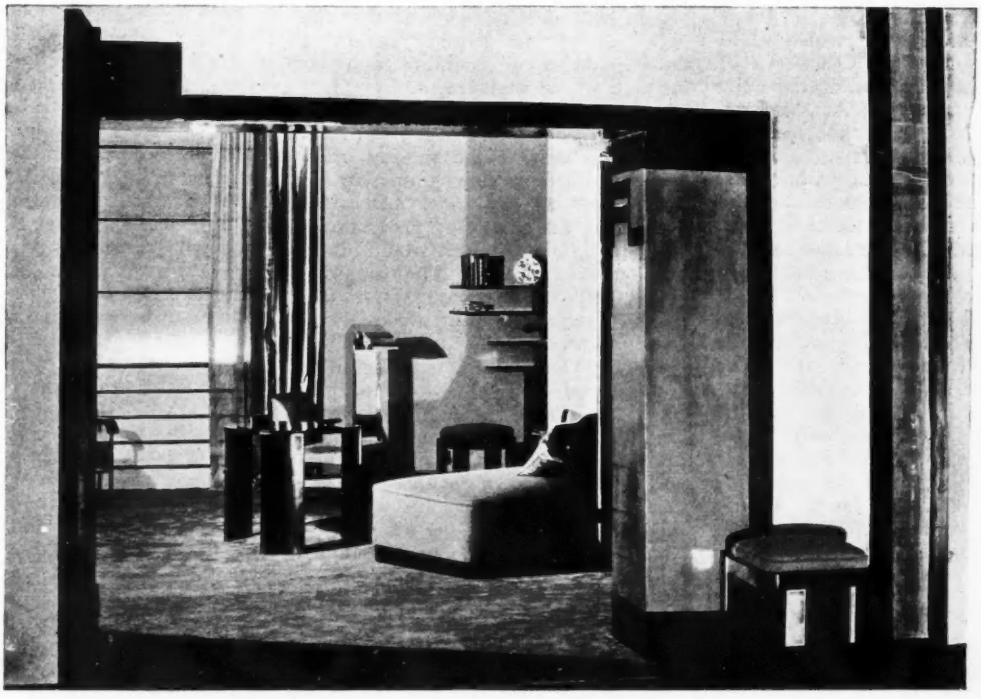
Had these artists had suitably designed rooms their paintings might be quite pleasant, but painted as they are they look out of place and somewhat gauche. Also, the lack of finish gives an effect that cannot be put forward as in any way representative of modern decoration. It is a pity to put into a book such witticisms as solid work, for as serious decoration much of this work cannot be considered by anyone with knowledge of form and design. It is too patchy and is purely pictorial. The decoration of a room concerns such details as proportions, mouldings, materials, etc. None of these essentials is considered seriously, but only applied painting. The mistake in the attitude of the authors is that they consider the trimmings without any knowledge of the foundations that come first. The designer of the foundations is the important person. The trimmers may come after, but should not be the "essential" as here. If one looks at the illustrations one has the distressing sense of paintings done over Victorian and Georgian foundations, irrespective of design.

There is also a chapter dealing with textiles and applied arts, but as none of these is of a commercial type they are interesting only as the work of a particular designer and not of the general trend. BASIL IONIDES

The New Interior Decoration. By Dorothy Todd and Raymond Mortimer. B. T. Batsford, Ltd. Price 21s. net.

PENNELL'S LONDON

A Little Book of London is a collection of reproductions of etchings by Mr. Joseph Pennell, each of the twenty-five charming little pictures representing a landmark somewhere in London, accompanied on the opposite page by a caption of varying length. Some of these captions contain not only items of historical and architectural interest, but unusual and amusing information. A case in point is that for the stairs at London Bridge, descriptive of the time when that bit of the river was a favourite bathing place for Society. . . . "Chesterton had addressed a letter



A sitting-room. By William E. Lescaze. "The illustration shows an interesting use of mechanistic forms." [*From* The New Interior Decoration.]

to his friend Lord Pembroke, who delighted in a swim in that part of the river, ' to the Earl of Pembroke, in the Thames, over against Whitehall.' " A very quaint address. We are also told what most people would probably not know, that St. Mary-le-Strand stands on the site originally occupied by the old maypole. These little scraps of human interest add enormously to the charm of a pictorial or any kind of guide, and there are quite a number of them in Mr. Pennell's book.

A Little Book of London. By Joseph Pennell. Peter Davies, Ltd. Price 2s. 6d. net.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

Mr. Greenwood, the Minister of Health, in moving the money resolution in connection with the Bill to maintain the Wheatley subsidy at its present level of £7 10s., instead of reducing it to £6 as proposed by Mr. Chamberlain, explained that the original housing subsidy under the 1923 Act was fixed at £6 a year for twenty years. That Act was prolonged by the 1924 Act, and the subsidy provided under the latter Act, introduced by Mr. Wheatley, was fixed at £9 a house for forty years, with an additional £3 10s. per house, making £12 10s. in all, for cottages built in agricultural parishes. As from the beginning of October 1927, the rates of subsidy were reduced from £6 to £4 in the case of the Chamberlain houses, and from £9 to £7 10s. in the case of the Wheatley houses, and, for houses in agricultural parishes, from £12 10s. to £11; equivalent to a cut of about 25 per cent. in the capital value of the subsidies. In December of last year the then Minister of Health brought in a resolution asking the House of Commons to confirm an Order, which would have operated as from October 1 of this year, abolishing altogether the subsidy under the 1923 Act, and reducing the subsidy under the 1924 Act from £7 10s. and £11 to £6 and £9 10s. Unless something were done in the present session, when the House of Commons met in October, they would be faced with the lower subsidy which would already have begun to take effect.

There would not have been time, in the few weeks at their disposal, for the Government to elaborate their more comprehensive housing and slum clearance policy, much less to get the measure through the House of Commons before the summer recess. He was, therefore, faced with something in the nature of an emergency. He did not want to prejudice the larger problem by allowing the subsidy under the 1924 Act to be reduced and finding himself with a reduced subsidy in the autumn. It was essential that time should be given to complete the proposals which would, he hoped, be put before the House at an early date when they resumed. He felt that it was necessary to give the local authorities some stability, so as not to imperil the continuous and steady progress of housing schemes. He believed that the Chamberlain subsidy had now exhausted its usefulness, and that, however long continued, it could not solve the real and pressing problem of providing houses to let. But the subsidy under the 1924 Act was an entirely different proposition. There was a stronger case for continuing it at the present level, more especially as the proposal to reduce it was made in the face of what he believed was the unanimous opposition of the local authorities. Mr. Chamberlain's case was that if he reduced the subsidy he would lower the price of houses. It was true today that the price of houses was lower than it was, but it was equally true that the number of houses being built was lower than it was; that was the real problem which faced them.

Dealing with the effect of the 1927 " cut " on house-building and employment, Mr. Greenwood gave figures which, he contended, showed that the reduction of the subsidy meant a slowing down of building and an increase of unemployment. He had now received an assurance from an important body representing the local authorities that, if the subsidy order were modified as now proposed, he could rely on the local authorities continuing their building programmes without the hiatus which would otherwise inevitably follow. The resolution of the Bill which would follow was designed merely to bring a measure of stability and continuity to the building of houses to let, while a larger and more comprehensive scheme was being prepared and passed through Parliament. He hoped that, with the hearty co-operation of the building industry, and with the closest assistance of the local authorities, to secure, within a relatively short time, the adoption of a reinvigorated and more determined housing and slum clearance policy.

After some criticism the resolution was agreed to and, at a later stage, the Bill giving effect to the terms of the resolution was read a second time.

Miss Lawrence informed Mr. Gould that the total numbers of houses erected in rural districts with the aid of subsidies under the Housing Acts of 1923 and 1924 up to June 1 last were 107,092 and 30,126 respectively, and, of the latter, 12,449 were built in agricultural parishes.

Miss Lawrence informed Mr. Scurr that the Minister of Health hoped to introduce legislation to apply the principle of town planning to built-up areas.

Mr. Gould asked the Minister of Health if he would give the most recent contract price for the building of working-class houses suitable for agricultural workers, with three bedrooms, sanctioned by the Ministry; what public subsidy was being provided; and what rents it was proposed to charge.

Mr. Greenwood replied that prices varied according to the size of house, locality, and nature and accessibility of the site. The average price in a number of contracts recently notified to his Department for three bedroom non-parlour houses to be erected by local authorities in agricultural parishes was £359. These houses were to be erected with the aid of Exchequer subsidy under the Act of 1924, viz. £11 per house per annum for forty years. He had no information as to the rents to be charged. They must be fixed in accordance with the provisions of section 3 of the Act, and his specific approval was not required.

Asked by Mr. Gould whether it was the intention of the Government to introduce legislation to enable it to deal effectively with any profiteering in building materials, Mr. Greenwood said he proposed in the coming weeks to consider this question along with others affecting the housing problem.

Sir Martin Conway asked the Chancellor of the Exchequer whether he would introduce legislation to exempt from death and estate duties monuments of historic interest, or lands remarkable for natural beauty, which might be bequeathed for national purposes to any public authority or the National Trust.

Mr. Snowden said that was a suggestion with which he had a good deal of sympathy, and he would bear it in mind for consideration at the proper time.

Sir Walter de Frece asked what steps were being taken in the public interest to ensure satisfactory plans from an architectural standpoint in connection with the proposed new bridges at Richmond and Hampton Court.

Mr. Morrison, the Minister of Transport, said that the County Councils of Middlesex and Surrey, in conjunction with his department, appointed well-known architects to collaborate with the engineers in the design of the bridges. This was in pursuance of the usual policy of his department.

LAW REPORTS

CLAIM FOR PROFESSIONAL FEES

Carrington v. *E. W. Bliss Co. King's Bench Division. Before Mr. Justice Hawke*

This was an action by Mr. Henry C. James Carrington, a consulting engineer and works architect, of Wood End House, Kingsbury Road, Erdington, Birmingham, against the E. W. Bliss Co., of Pocock Street, London, S.E., to recover a sum of money, £15,000, in respect of professional services which he said he had rendered on the instructions of the defendants.

Mr. R. A. Willes, for the plaintiff, said in 1919 there was a trade boom and defendants wanted to build a factory for the manufacture of steel presses. It was orally arranged between plaintiff and defendants that he should be remunerated on the scale of charges of the Royal Institute of British Architects. He was first asked to find a suitable site, and, after doing so, secured a reduction in price. Plaintiff then made the necessary surveys and detailed working drawings, and prepared plans and specifications, as well as bills of quantities. He obtained tenders and advised defendants about that matter. On the tenders the estimated cost was to have been £347,000. In November, 1926, defendants intimated that in order if possible to get better prices they were postponing the placing of the contracts. That suspension of the work was continued until June 1927, when defendants informed plaintiff that they had abandoned the project.

Plaintiff gave evidence in support of his case.

In cross-examination he denied that some of the charges were a "try on." He admitted he had never been a member of the Royal Institute of British Architects. He was a consulting engineer, but he had the qualifications to belong to the R.I.B.A.

Defendants denied that they had agreed to pay the R.I.B.A. scale. They had paid plaintiff £200 in respect of the reduction he had secured in respect of the purchase of the site, and in 1921 they paid him £2,000, which they contended was a complete and final settlement of his claim. In reply, plaintiff argued that the £2,000 was only a payment on account. Defendants also contended that plaintiff's claim was barred by the Statute of Limitations. They further maintained that plaintiff had estimated the cost of the work at £63,000, whereas in fact the work would have cost more than twice as much. In the circumstances the services he had rendered to them were valueless.

His lordship, in giving judgment, said he was a little sorry for the disappointment this matter had been to Mr. Carrington, who possibly thought he had got on to a "good thing." There was every possibility of his reaping a very rich harvest as a result of his own ingenuity. His lordship thought Mr. Carrington intended to settle all his claims against the company for £2,000 on the chance that he might get employment in the future from them. He wanted £2,000 at the time very badly, and he had an honest belief in the advantages of this scheme, which he hoped some day would come to fruition.

Judgment was entered for the E. W. Bliss Co., with costs, plaintiff to have the costs of two separate items in respect of which the defendants had made payment into court.

WATER SUPPLY: TRADE OR BUSINESS PURPOSES

Manchester Corporation v. *Buttle. Chancery Division. Before Mr. Justice Eve*

This case raised an issue as to the rights of the Corporation of Manchester to charge a dentist for water on conditions to be agreed, seeing that it was for use at a dentist's chair and was for other than domestic purposes.

The Corporation claimed a declaration that the water supplied by them to Mr. Wm. John Buttle, a dental surgeon, of 194 Stockport Road, Levenshulme, Manchester, for use at his dentist's chair, was used for other than domestic purposes; that they were under no obligation to supply such water to the defendant except on conditions to be agreed, or at all, except by meter or special agreement; and that the defendant's dwelling-house was used in part for a trade or business.

Mr Farwell, K.C., appearing for the Corporation, referred to the Manchester Corporation Waterworks Act, 1854, under which Levenshulme and other places were included in the limits of supply and since 1909 Levenshulme had been within the boundaries of the City of Manchester. By section 16 of the Manchester Corporation Waterworks and Improvement Act, 1869, no person was entitled to require, nor was the Corporation bound to supply, any dwelling-house with water otherwise than by meter or by special agreement where any part of such dwelling-house was used for any trade or business purposes. The plaintiffs alleged that they had offered to supply water to the defendant on payment of an annual sum equivalent to the domestic water rate and public water rate and the further sum of 12s. 6d., but the defendant had refused to make any payment to the plaintiffs beyond the domestic water rate and the public water rate. Counsel argued that the defendant in his practice as a dentist was carrying on a trade or business within the meaning of the special Act, and alternatively, that the water used at his dentist's chair was used for other than domestic purposes.

Mr. Gover, K.C., for the defendant, contended that there were legal decisions in favour of the supply being for domestic purposes. He argued that any construction of the section should be generous, and that a dentist's was not a "trade" or "business."

His lordship, in giving judgment for the plaintiffs, with costs, said if a house or any part of it were held jointly with premises used for trade or business, then the object of section 16 was to exclude that part of the premises used for business from the statutory rights of supply given under section 93 of the earlier Act. It seemed, therefore, that the house occupied by the defendant was a house, part of which was used for professional or business purposes. The Corporation were, therefore, entitled to declarations that the house occupied by the defendant was used in part for trade or business purposes and that the plaintiffs were not bound to supply any water to him except by meter or agreement.

CORRESPONDENCE

DEVELOPMENT OF THE R.I.B.A.

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The letter of Mr. W. F. Andrews in your issue for June 26 is the fairest one I have seen on the vexed question of qualification—and it is particularly so coming from him—as if it is the gentleman I think, he would sacrifice the letters himself if his suggestions were adopted.

I fear, however, that there are many others not so minded. R.H.

A PLEA FOR FLOWER-BOXES

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—In his paragraph in your issue of July 10 on "A plea for flower-boxes," Astragal says, "the window-box is good for every reason." I cannot agree with him.

Within the last few weeks I have surveyed a number of flats, where the tenants have from time to time brightened the street with window-boxes. The boxes have leaked like sieves, as all proper boxes should do; and the sills of all the windows are "finished" and in need of renewal years before their time.

Have you ever walked along a street with flower-boxes or pots on the windows above?

They are worse than loose slates on a windy night.

It is bad enough keeping an eye on the motor traffic of today and dodging it. What is it going to be with flying window-boxes added to our troubles?

Does Astragal suggest the boxes and contents can in this case be taken as wreaths?

JAMES W. STEWART

PRIMITIVE DETAIL OF TODAY

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—With regard to plate 20 of Primitive Detail of Today, published in your issue for July 3, I would suggest that Mr. A. J. Penty acquaints himself with English briquettes before stating that he prefers Dutch materials to English because of the smallness of size as against the English products.

It is a great pity that home products are not given the same quiet assistance as has been given foreign materials in this case. Our English colours, textures, and sizes are superior in every respect to the dull, dingy Dutch.

BRICKMAKER

[In reply to Brickmaker's observations, I beg to say I was not aware that English briquettes were to be obtained as small as the Dutch ones. As to his comments on Dutch bricks generally, all I can say is that I do not share his opinion.—A. J. PENTY.]

SOCIETIES AND INSTITUTIONS

R.I.B.A. STATUTORY EXAMINATIONS

The R.I.B.A. statutory examinations for the office of district surveyor under the London Building Acts, or building surveyor under local authorities, will be held at the R.I.B.A., London, on October 16, 17, and 18, 1929. The closing date for receiving applications for admission to the examinations, accompanied by the fee of £3 3s., is October 1, 1929. Full particulars of the examinations and application forms can be obtained from the Secretary, R.I.B.A., 9 Conduit Street, W.1.

THE WELSH SCHOOL OF ARCHITECTURE

The following awards have been made as a result of the sessional examinations at the Welsh School of Architecture, the Technical College, Cardiff.

Fifth Examination: For the diploma awarded at the end of the five years' full-time course, exempting from the R.I.B.A. final examination with the exception of the subject of professional practice: C. J. Bartlett (Distinction in Thesis) P. Budgen, A. E. Jewell. C. J. Bartlett has been awarded a "Dovey" scholarship for post-graduate work, value £75. Fourth Examination: F. K. Aitken. Third Examination: For the certificate awarded at the end of the three years' full-time day course, exempting from the R.I.B.A. intermediate examination: J. T. Banks, R. Barraud, H. J. Hughes, W. J. Maton, I. F. B. Richards, C. Rosser, J. P. Ward. C. Rosser has been awarded a fourth-year maintenance scholarship, value £40, plus tuition fees. Second Examination: N. D. Ayres, W. J. Davies, D. M. Jones, G. Richards. First Examination: H. J. Lewis, D. J. Thomas, C. W. Williams.

CALTON JAIL SITE

Following is a copy of a letter sent by Sir Banister Fletcher, President of the R.I.B.A., to the Premier on the proposed new buildings on the Calton jail site, Edinburgh:

SIR,—The Council of the Royal Institute of British Architects have given long and serious consideration to the proposal of H.M. Government to erect important new Government buildings on the Calton jail site, Edinburgh, and to the suggestion that the designing of these buildings should be entrusted to H.M. Office of Works.

The magnificent and unique character of the site demands that the fullest advantage should be taken of this great opportunity of adding really worthy buildings to the capital of Scotland. As a result of many years' experience my Council are convinced the best results cannot be hoped for unless the collective architectural ability of the country is brought to bear upon the problem by means of a competition. If designs are produced by one or more of a small group of departmental architects—however able and well-intentioned they may be—the result will almost inevitably be a routine building of the ordinary type.

The principle of competition in the case of buildings of outstanding national importance is not only advocated by the Royal Institute and its allied societies, but has been accepted for many years by the national Government, and my Council desire to urge H.M. Government to adhere to the principle in the case of the buildings now contemplated on this very important Edinburgh site.

It cannot be denied, both as regards the site and the extent of the contemplated buildings, that the opportunity is one of outstanding national importance. My Council understand that it is the desire of the Government that these buildings should be proceeded with with as little delay as possible in order to assist in dealing with the unemployment problem. The site is at present occupied by a considerable number of large and substantially constructed prison buildings. These have to be entirely removed before even the work of the foundations in connection with the new buildings can be begun. My Council venture to suggest that preliminary contracts should be entered into for the removal of these buildings and the stacking of the material, while the necessary steps for obtaining designs are being taken.

(Signed) BANISTER FLETCHER,
President, R.I.B.A.

The Rt. Hon. J. Ramsay MacDonald, P.C., M.P.

A.A. SCHOLARSHIPS

Following are the awards of the scholarships and prizes of the Architectural Association. Public School Entrance Scholarship, value £75 12s: E. S. Powell; scholarship renewals: Messrs. R. Wilson, Anthony Cooper, R. D. Scott, D. Booth, and Miss C. J. Dillon.

A.A. Measured Drawings Prize, books value £20: Miss B. J. Read.

First-Year Course. "Howard Colls" Travelling Studentship, value £15 15s: F. Sprott; second prize, books value £5 5s.: C. Y. Koh; honourable mentions: Messrs. R. L. Banks, C. P. Dickinson, and R. E. Moira.

Second-Year Course. A.A. Travelling Studentship, value £26 5s.: Miss M. Crowley; second prize, books value £10 10s.: J. P. Brandon Jones; honourable mentions: Messrs. L. A. Drake, C. A. Richards, E. Mayorcas.

Third-Year Course. A.A. Travelling Studentship, value £31 10s.: Miss J. G. Ledeboer; Holloway Scholarship, tenable for two years, value £300: A. G. Gibson; second prize, books value £10 10s.: D. R. Stark; honourable mentions: Messrs. H. J. Franklyn, J. R. Atkinson, J. F. D. Wylson, and G. G. Laidler.

Fourth-Year Course. R.I.B.A. Henry Jarvis Scholarship, value £50: G. R. Linfield; year prize, books value £10 10s.: J. V. Nisbet.

Fifth-Year Course. A.A. Travelling Studentship, value £50: S. E. T. Cusdin; "Henry Florence" Travelling Studentship, value £50: A. H. Girard; "Alex Stanhope Forbes" prize for the best colour work during the year, books value £5: D. R. Burles; honourable mentions: Messrs. D. E. Barry, J. A. Ritchie, J. W. Parr, H. S. M. Carver, and Miss B. Scott.

Medal presented annually by the Société des Architectes Diplomés par le Gouvernement, Paris, to the best diploma student of the year: E. B. O'Rorke.

Royal West of England Academy School of Architecture (affiliated with the Architectural Association). Prize in design, value £5 5s.: C. W. A. Inglis.

TRADE NOTES

Among the latest of the numerous greyhound and speedway tracks to be equipped with electric light by the Metropolitan-Vickers and Metro-Vick Supplies is the speedway at the Wembley Stadium. In the official report of the speedway opening it is stated: "I have nothing but praise for this event. . . . The lighting is really wonderful." Special reference to the lighting is made in the opening programme under the heading "Wonderful Lighting": "The lighting of the track is the most brilliant yet introduced on any speedway in this country. Forty 29-ft. standards have been erected round the track, the arms of which stretch across the track to distances varying from 16 to 24 ft. From each of these a 3,000 candle-power lamp is suspended, thus giving a total of 120,000 candle-power of light to flood the track during racing. This lighting system will thus show up fully the spectacular features of the racing, and will permit a perfect view from every point in the stands." Again, *The Daily Chronicle* speedway correspondent writes: ". . . . the floodlighting impressed me as particularly good, so much so that one could watch every movement of the riders all the way round." These are unsolicited testimonials to the results which have been accomplished by co-operation between the engineers of the Wembley Stadium Greyhound Racecourse, Ltd., and the illuminating engineers of Metro-Vick Supplies.

A complete treatise on the production, use and maintenance of rubber hose has just been produced by the Macinlop Company. It is entitled *The Hose Handbook*, and covers the whole field of hose manufacture from the basic materials, through the processes of armouring, wrapping, vulcanizing and, finally, stripping. There are a complete index and summary of all the different types of hose, a section dealing at length with the various kinds and their uses, and interesting photographs and illustrations. Among the useful tables included are those for working pressures for different types of hose, areas and circumferences of circles, and various conversion tables. A chapter gives the comparisons in flow and resistance of liquids running in steel pipes and in rubber-lined pipes.

ANNOUNCEMENTS

The Midland Bank Limited announce that Mr. G. P. A. Lederer, formerly an assistant general manager, has been appointed a joint general manager.

The directors of The Westminster Bank, Ltd., have declared an interim dividend of 10 per cent. for the half-year ended June 30 on the £4 shares, and the maximum dividend of 6¼ per cent. on the £1 shares for the same period. The dividends, 2s. per share and 1s. 3d. per share respectively (both less income tax), will be payable on August 1.

THE BUILDINGS ILLUSTRATED

Following are the names of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Elizabeth Garrett Anderson Hospital (pages 122-127). General contractor, Albert Monk. Sub-contractors: Diespeker & Co., Ltd., fireproof construction; J. Jeffreys & Co., heating and hot water; Grierson, Ltd., electric heating, lighting, and kitchen equipment; Dent and Hellyer, Ltd., plumbing; Teale Fireplace Co., stoves; James Gibbons, Ltd., door furniture; Carron Co., iron staircases; Mellowes & Co., Ltd., and Crittall Manufacturing Co., casements; Joseph Avery & Co., sunblinds; Giusti Patents and Engineering Works, Ltd., metalwork; Waltham Cross Joinery Co., joinery; S. Bysouth and Son, stonework; Carter & Co., tiling; Express Lift Co., Ltd., lift; James Slater & Co., sterilizers; A. E. Dean & Co., X-ray; Mather and Platt, Ltd., fire hydrants.

Larkhall estate (pages 128-132). General contractors, C. W. Miskin and Sons, who were also responsible for the demolition, excavation, foundations, joinery, and mantels. Sub-contractors: Val de Travers, asphalt; R. G. Ward & Co., bricks; Enfield Stone Co., artificial stone; Standard Steel Co., structural steel; Stirling and Johnson, tiles; Truckle & Co., partitions; Goldstein & Co., glass; Matthew Hall & Co., cast lead and plumbing; G. N. Haden and Sons, hot-water supply; The County of London Electric Supply, Ltd., electric wiring, electric light fixtures, and electric heating; General Post Office, telephones; Palmer & Co., rolling shutters and fireproof doors; W. G. Capewell, plastering; Cashmore, Ltd., metalwork; General Tile Co., wall and floor tiling; The Metropolitan Water Board, water supply.

The Crown Hotel, Maidenhead (pages 136-139). General contractors, Wm. Creed & Co. Sub-contractors: Herbert Maryon, sign, and fibrous plaster decorations to club-room; Liberty & Co., fibrous plaster decorations to bars and hotel lounge; S. and E. Collier, Ltd., facing bricks; Bratt Colbran & Co., and Waring and Gillow, Ltd., fireplaces; Benham and Sons, Ltd., cooking apparatus and carving tables, etc.; Waygood-Otis, Ltd., service lift; Doulton & Co., and the Stourbridge Fireclay Co., sanitary fittings; Bell's Poilite and Everite Co., Ltd., rubber tiling to bathrooms; Francis Morton, Junior & Co., floor springs for dancing floor.

House at Ewell (pages 148-149). General contractors, Goodship and Saunders. Sub-contractors: Shelley, bricks; Hollis Bros., wood-block flooring; The London Plenum Heating Co., central heating; Stimen, gas stoves; Heaped Fire Co., grates; City Iron Co., sanitary fittings; Yannedis & Co., door furniture; Crittall Manufacturing Co., casements; Carter & Co., tiling; Saunderson, wallpapers.

COMPETITION CALENDAR

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should be made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea before July 20. Deposit £2 2s.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

20231. Chettle, W. A. Reinforced-concrete structures. July 2.
20265. Crittall & Co., Ltd., and Herring, E., and Musgrave, J. L. Heating and cooling buildings. July 2.
20216. Ewing, J. A. Equatorial setting for theodolites, &c. July 2.
20683. Haines, B. T. Sectional bridges. July 5.
20777. Hall, J. H., and Hall and Kay, Ltd., and Kay, H., and Kay, P. Ventilation of buildings. July 6.

SPECIFICATIONS PUBLISHED

314554. Barker, A. H. Heating and cooling devices for buildings and other structures.
314406. Lewis and Grundy, Ltd., and Pearce, J. H. Domestic fire-grates.
314361. McDonald, J. Windows.
314704. Sleigh, H. L., Cheston, A. S., and Chinn, W. Cushioning and positioning means for doors and other movable parts.

ABSTRACT PUBLISHED

311994. Barr, J. F., Killineer House, Drogheda, Co. Louth, Ireland, and Wolfsholz, A., 2b, Via Aguggiari, Varese, Italy. Docks, locks, &c.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The L.C.C. is to widen STREATHAM High Road at a cost of £113,500.

The COULSDON U.D.C. is considering the question of another housing scheme.

Mr. J. P. Oldaker is to develop Hayes Lane and Lawrence Road, COULSDON.

The L.C.C. Education Committee has prepared plans for improvements at HACKNEY DOWNS School at a cost of £8,600.

Plans have been prepared for the reconstruction of the Wilberforce School, PADDINGTON, at an estimated cost of £8,250.

The L.C.C. is acquiring nine acres of land in Leigham Court Road, STREATHAM, for the erection of tenements.

The Surrey Education Committee are to proceed with the erection of an elementary school at SELSDON.

The L.C.C. Education Committee has obtained a site in Eltham Road, WOOLWICH, for the erection of a secondary school for 450 boys.

H.M. Office of Works is to proceed with the erection of a telephone exchange at Church Way, SANDERSTEAD.

Plans have been passed at SOUTHFIELDS for the erection of seventy-two houses for Mr. F. H. Skeens.

Plans passed at SYDENHAM: Four houses, Laurie Park Avenue, for Mr. R. Elsey Smith; six houses, The Drive, for Messrs. C. H. Gibson, Ltd.

The WANDSWORTH Board of Guardians has prepared a scheme for improvements at the Tooting Home, Church Lane, at a cost of £28,000.

The LEWISHAM B.C. has approved sketch plans for the erection of sixty flats at Winchfield Road, SYDENHAM, at a cost of £27,400.

The Ministry of Health has sanctioned the scheme of the MIDDLESEX County Council for the erection of six blocks of villas at Shenley mental colony at a cost of £42,500.

The MIDDLESEX Education Committee has obtained sanction for a loan of £13,500 for extensions at the Trinity Council School, Wood Green.

The WANDSWORTH Board of Guardians has prepared plans for the erection of additional blocks at the infirmary in Ousley Road, Battersea. The cost is estimated at £85,000.

The HAMMERSMITH Board of Guardians has prepared a scheme for the enlargement of the infirmary in Ducane Road, the cost being estimated at £100,000.

The BATTERSEA B.C. Electricity Committee has instructed the borough engineer to prepare detailed plans for the erection of a boiler-house at the power station at a cost of £30,680.

Plans have been passed at NORWOOD for the erection of sixteen houses, Roxburgh Road, and ten houses, Cheviot Road, for Messrs. William Wilmot, Ltd.

Plans passed at LEE: eighteen houses, Winn Road, for Mr. W. T. A. Froude; house, Guibal Road, for Mr. J. G. Witcombe; house, Guibal Road, for Mr. W. T. A. Froude.

Plans passed at PUTNEY: Two houses, Lytton Grove, for Mr. C. Hamilton Simpson; six houses, Kingston Road, for Messrs. H. J. May, Ltd.; four houses, Chartfield Avenue, and one house, Genoa Avenue, for Mr. J. N. Randall Vining.

Plans passed at FOREST HILL: Additions to Roman Catholic Church, Brockley Park, for Mr. Wilfrid C. Mangan; twelve houses, Thorpewood Avenue, for Mr. G. T. Harman; house, Canonbie Road, for Mr. C. F. Coxon.

Plans passed at WANDSWORTH: Eight flats, Trinity Road, for Mr. W. M. Marcus; sports pavilion, Burntwood Lane, for Messrs. Boulton and Paul, Ltd.; additions, Convent of the Presentation, 49 West Hill, for Mr. J. N. P. Conlan.

Plans passed at STREATHAM: Ten houses, Beltrees Grove, for Messrs. Polden and Authers; eight houses, Broadlands Avenue, for Mr. Hugh Macintosh; additions, 134 Streatham Vale, for the United Dairies, Ltd.

Plans passed at BLACKHEATH: Four houses, Oakcroft Road, for Mr. G. T. Harman; school block, St. Joseph's Academy, Lee Terrace, for Mr. William Ellis; house, Beaconsfield Road, for Messrs. J. S. Cowley and Son.

Plans passed at CHARLTON: Fourteen houses, Marlborough Lane, for Messrs. Fretho, Ltd.; two houses, Charlton Road, for the County Service Association, Ltd.; sixteen houses, Pound Park Road, for the Greenwich Metropolitan Borough Council.

The L.C.C. is being called upon to vote a capital estimate of £425,000 for the scheme for the construction of the new approach road to the docks, a scheme being undertaken by the Government in association with the local authorities, at a total cost of £3,763,000.

Plans passed by the SHOREDITCH B.C.: Building 19-23 Kingsland Road, abutting on Windsor Place; partially rebuilding 132 Shoreditch High Street as a branch of the Midland Bank; cask store, Wenlock Brewery, Wenlock Road; warehouse, New North Road; additions, 13, 15, and 17 Pimlico Walk.

Plans passed by the LEWISHAM B.C.: Additions, South-Eastern Hospital for Children, Sydenham, for Mr. A. S. Kilby; building, Inglemere Road, Forest Hill, for Mr. J. G. Hands; building, 201 and 203 Bromley Road, for Mr. J. Watt; building, 8 to 30 Winsford Road, for Messrs. Middletons (Builders), Ltd.; workshop, Lee High Road, for Messrs. Purvis and Purvis; additions, "Tiger's Head" public-house, Bromley Road, for Mr. A. R. Mayston; house, Love Lane, for Mr. H. R. Watt; additions, St. Hilda's Hall, Brockley Rise, for Messrs. G. Parker and Sons, Ltd.

Plans passed at ELTHAM: Offices, shops, etc., Eltham High Street, Elm Terrace, and Messiter Place, for Mr. George S. N. Stone; thirty houses, Green Lane, for Messrs. Kevan and Buen; house, North Park, for Mr. W. R. Hindmarsh; house, Footscray Road, for Mr. B. Stewart; six shops, Westmount Road, for Messrs. Fretho, Ltd.; house, North Park, for Mr. W. R. Hindmarsh; garages, Deansfield Road, for Mr. George S. N. Stone; five shops, Westborne Avenue, for Messrs. Montague Holmes and Sons; house, Cadwallon Road, for Messrs. Eaglen Bros.; church hall, Appleton Road, for Mr. J. O. Hughes; four shops, Avery Hill Road, for Mr. W. E. Wright; nine houses, West Park, Eltham, for Mr. W. R. Hindmarsh; two houses, Merchland Road, New Eltham, for Mr. W. H. Dudley; house, Dunvegan Road, for Messrs. Flood and Wright; forty-four houses, Chardane Road, New Eltham, for Messrs. Eley and Allen; ten houses, Blanmerle Road, New Eltham, for Mr. Robert Kevan.

EASTERN COUNTIES

The ESSEX County Council is to widen the bridge at Harlow at an estimated cost of £10,500.

The Herts Education Committee is to purchase about five acres of land at BALDOCK to erect a new elementary school thereon.

The Herts Education Committee has purchased land at Mill End, RICKMANSWORTH, for the provision of elementary school accommodation.

The Herts Education Committee is to purchase a site of about two acres of land for the erection of a public elementary school at SANDON.

The Herts Education Committee is to acquire a site at EAST BARNET of about six acres of land in extent to erect a secondary school.

The Herts Education Committee has empowered the chairman to purchase about six acres of land for purposes of the new grammar school for boys to be erected at BARNET.

Plans passed by the LOWESTOFT Corporation: Four houses, Waveney Drive, for Mr. J. A. Gaze; house, Bird's Farm Building Estate, Kirkley Run, for Mr. W. J. Wollard; factory, Raglan Street, for Messrs. Steward and Patteson, Ltd.; two houses, Laurel Road, for Mr. F. W. King; two cottages, St. Peter's Street, for Mr. R. Lowe; house, Blackheath Road, for Mr. A. G. Yellup; house, Lorne Road, for Mrs. C. Sewell; showroom addition, 100 High Street, for Messrs. J. and J. Edwards.

SOUTHERN COUNTIES

Plans passed by the GRAVESEND Corporation: Thirty-five house, Hillingdon Road, for Messrs. Dagnall Bros; bungalow, Portland Avenue, for Mr. W. Gould; alterations, "India Arms" public-house, West Street, for Messrs. Charrington & Co., Ltd.

Plans passed by the HASTINGS Corporation: House, Filsham Road, St. Leonards, for Messrs. Callow and Callow, architects; houses, Filsham Road, St. Leonards, for the Misses Barrow, Miss Richmond, and Mrs. Chubb; house, Filsham and Bexhill Roads, St. Leonards, for Messrs. Ward, Son and Wray, architects; conveniences Homesdale Gardens, Hastings, for Mr. R. Hembrow, architect; shop and house, Bexhill Road, St. Leonards, for Messrs. Ward, Son and Wray, architects; alterations, 42 Middle Street, for Mr. J. Watt; shop, Old London Road, for Mr. K. Towner, architect; flat, etc., North Lodge, Milward Road, for Mr. H. Burleigh, architect; alterations, 15 and 16 Queen's Road, for Mr. H. D. Dodd, architect; alterations, 22 and 23 Queen's Road, for Messrs. Ward, Son and Wray, architects; additions, 81 Clifton Road, for Mr. H. M. Jeffery, architect; six houses, De Cham Road, St. Leonards, for Mr. H. M. Jeffery, architect; twelve houses, St. Helen's Road, for Mr. W. G. Stanton; additional tenement and extensions to garage, Hill Crest Garage, Tower Road, for Messrs. Callow and Callow, architects; alterations, 94 Bohemia Road, St. Leonards, for Messrs. Ward, Son and Wray, architects; additions, 193 Queen's Road, for Mr. P. H. Oxley, architect; bungalow, Vale Road, St. Leonards, for Messrs. C. R. Salter and Sons; additions, The Wilderness, St. Helens Park Road, St. Leonards, for Messrs. Aylward Bros.

SOUTH-WESTERN COUNTIES

The PLYMOUTH Education Committee has obtained the approval of the Minister of Health to the appropriation of a site in Cobourg Street, for the erection of education offices.





House at Ewell. By L. L. T Sloot. The entrance front (left) and a view from the garden (right). *For plans see page 149.*

The PAIGNTON U.D.C. Housing Committee is considering the purchase of additional land for the purpose of the erection thereon of houses for the working classes.

Plans passed by the WEYMOUTH Corporation: Six houses, Twelve Acres Estate, for Messrs. S. Jackson and Sons; schoolroom, Weymouth College, for Messrs. Crickmay and Sons; two houses, Southlands Road, for Messrs. S. Jackson and Sons; additions, Royal Hotel, for Messrs. Crickmay and Sons; shop, Soldiers and Sailors Home, King Street, for Mr. S. A. Jackson.

Plans passed by the PAIGNTON U.D.C.: Additions, Paignton Club, Sea Front, Paignton, for the club; extensions, St. Andrew's Church, Sands Road, for the church authorities; additions, Palace Hotel, Stearthfield Road, for the Palace Hotel, Ltd.; house, Barcombe Heights, for Mr. F. C. Varley; two houses, Elm Park, Colley End Road, for Messrs. Maunder and Son; bungalow, Totnes Road, Collaton, for Mr. J. Maunder; two shops, Torquay Road, for Messrs. Dunton and Easterbrook; bungalow, Dartmouth Road, for Messrs. W. N. Coldrey and J. S. Huggins; layout of destructor site, York Road, for the U.D.C.

MIDLAND COUNTIES

The WALSALL Corporation is acquiring seven acres of land at Harden for the erection of houses.

The WALSALL Corporation is purchasing land at Maw Green for housing, a new sports centre, and the construction of a road.

On behalf of the Governors of WELLINGBOROUGH Grammar School plans have been prepared for new buildings estimated to cost £26,500.

The Northants Education Committee has purchased a site at BROUGHTON for the erection of an elementary school.

The County Councils of BEDFORDSHIRE and NORTHAMPTONSHIRE and the NORTHAMPTON Town Council are to combine to purchase Bromham House and 135 acres of land, 16 miles from Northampton, and to provide a colony for medical treatment with administrative buildings for 500 patients, but with homes for only 300 beds for patients in the first instance. The total cost is estimated at £143,000.

NORTHERN COUNTIES

The DONCASTER Education Committee is to erect an elementary school for 700 children.

The WEST RIDING Education Committee has voted £17,500 for repairs and improvements at various schools.

The BRADFORD Education Committee is considering the erection of a school with infants' and junior accommodation on a site at Wyke.

The Hull Corporation Housing Committee recommends a scheme for fencing all the housing estates at a total cost of £19,000.

The West Riding Education Committee has purchased a site at Ashfield for the erection of new premises for the BINGLEY technical school.

The West Riding Education Committee has contracted for the erection of the new middle school at FEATHERSTONE at £15,500.

The MANCHESTER Education Committee has obtained land at Ladybarn for the erection of an elementary school.

The HULL Education Committee has purchased a house in Park Street for the extension of the Technical College.

The BARNSLEY Education Committee has obtained sanction to borrow £69,660 for the erection of a new technical college.

The LEEDS Corporation is seeking a loan of £70,250 for the erection of 242 houses on the Middleton and Meanwood housing estates.

The West Riding Education Committee has authorized further extensions at the KEIGHLEY Technical College at a cost of £7,000.

The West Riding Education Committee is proceeding with the erection of a secondary school at MALTBY at a cost of £30,382.

The BRADFORD Corporation Libraries Committee has decided to select another site for a new central library within the central area.

The BLYTH Corporation has decided to carry out, by direct labour, the erection of a new secondary school.

The West Riding Education Committee has purchased land at SKELMANTHORPE for the erection of an elementary school.

The West Riding Education Committee is to erect an infants' school at MALTBY at a cost of £6,000.

The West Riding Education Committee is to extend the Woodhouse Council School at HATFIELD at a cost of £7,500.

The West Riding Education Committee has passed amended plans for the erection of an elementary school at BOROUGHBRIDGE at a cost of £11,800.

The WEST RIDING Education Committee has passed plans for the carrying out of extensions at King James's Grammar School, Knaresborough, at a cost of £17,200.

At a meeting of the BARNSLEY Corporation the borough engineer was asked to prepare plans for the erection of municipal washhouses on land in Race Street.

The BRADFORD Corporation is seeking power to use the site of the disused burial ground (now the casual market) at James Street as an extension of the Rawson Place Market, and power to erect shops and other buildings on the site.

The Board of Control has approved the plans for the WEST RIDING C.C. of the proposed lay-out of the Oulton Hall Colony for the ultimate accommodation of 2,030 mental defectives, subject to certain minor qualifications. Drawings in detail are now being prepared of the various buildings proposed to be included in the first building scheme.

The BRADFORD Corporation has instructed the city architect to prepare plans and estimates for the erection of shops, offices, storerooms, etc., on the east side of Bank Street, on land extending from the Midland Bank to Brook Street; remodelling of 43 Brook Street, and the erection of shops at Barkerend Road from Peckover Street to Upper Park Gate, and rebuilding of burnt-out warehouses at Vicar Lane and Great Cross Street.

Plans passed by the BARNSLEY Corporation: House, Swift Street, for Mr. H. Fisher; wastepaper house, Old Mill Lane, for Yorkshire Paper Mills; new premises, Eldon Street and Queen Street, for Messrs. Montague Burton, Ltd.; storeroom, off Shambles Street, for Mr. R. Buswell; additions to shop, Primrose Hill, for Mr. C. H. Beeson; two houses, Honeywell Lane, for Mr. F. Joynes; house and shop, Pontefract Road, Monk Bretton, for Mr. W. Davis.

Plans passed by the BRADFORD Corporation Two houses, Belmont Gardens, for Messrs. Edge and Pace; eight houses, High Park Crescent, for Mr. H. Procter; two houses, Beacon Road, Wibsey, for Mr. T. E. Bairstow; three houses, Cleckheaton Road, for Mr. J. Bentley; ten houses, Pellon Terrace, for Mr. T. E. Feather; four houses, Bryanstone Road, for Mr. T. Sharp; four houses, Norman Avenue, for Mr. J. H. Smith; three houses, Leeds Road, Fagley, for Messrs. W. Horne and Sons; two houses, Mayo Crescent, and two houses, Mayo Road, for Mr. A. Robinson; four houses, Pullan Avenue, for Messrs. W. Horne and Son.

WALES

The SWANSEA Housing Committee is seeking sanction to borrow £42,766 for the erection of a further 103 houses on the Townhill site.

Plans passed by the SWANSEA Corporation: House, Clydach Road, for Mr. Thos. Thewlas; alterations, 16 Uplands Crescent, for the Midland Bank, Ltd.; alterations, 13 and 14 Walter Road, for Messrs. J. T. Davies, Ltd.; additions, Working Men's Club, Slate Street, for the trustees; alterations, Prospect Place, for the Weights and Measures Department; new street, Bohun Street extension, Manselton, for Sir C. Mansel; extensions, Technical College, Mount Pleasant, for the Education Committee; alterations and additions, High Street, King Street, and Orchard Street, for Mr. Lewis Lewis; pavilion, Pryderi Gardens and pavilion, Graig Farm recreation ground, for the Parks Committee; two houses, The Mayals, for Mr. E. W. Saunders; house, Gower Road, Penyrheol, for Mrs. Catherine Harris; house and shop, Penygraig Road, for Mrs. N. G. Leaker; house and shop, Tycoch Road, for Mr. B. A. John; two houses, Cockett New Road, for Mr. Griff John.

MISCELLANEOUS

Plans are being prepared for the DOUGLAS (I. o. M.) Corporation for the erection of houses on a site in Bigwell Street.

The CAPE TOWN city engineer has prepared a layout of land at Kenilworth for a housing scheme.

The CAPE TOWN Corporation is to complete the Devil's Peak housing scheme at a cost estimated by the city engineer at £123,000.

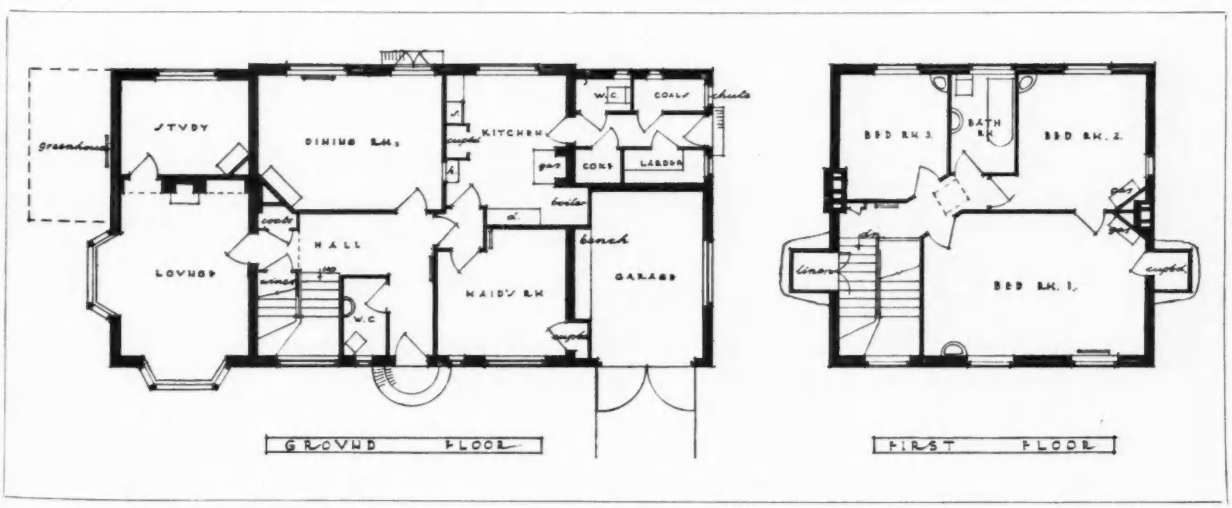
The CAPE TOWN Hospital Board is shortly to proceed with the erection of a hospital with 850 beds at Groote Schuur.

Messrs. Syfret, Godlonton and Low are to erect a shoe factory for the Bally Shoe Company at Ravenscraig Road, Woodstock, CAPE TOWN, at a cost of £30,000.

Messrs. Ohlsson's Cape Breweries, Ltd., are to reconstruct the British Oak Hotel, Salt River, as a consequence of an improvement scheme being undertaken by the CAPE TOWN Corporation.

The DOUGLAS (I. o. M.) Corporation has asked Mr. Teare, the architect, to prepare plans for the erection of a public washhouse on the Pulrose estate.

The DOUGLAS (I. o. M.) Corporation has been promised a grant of £24,000 to enable the Harbour Commissioners and the Corporation to continue the work of widening the Loch Premenade and the pier during the ensuing winter, of which sum £18,000 had been allocated to the Corporation.



House at Ewell. By L. L. T. Sloot. Ground- and first-floor plans. The exterior is of brick and rough cast, with steel casement windows and tiled roof.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	•1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A	Barnard Castle	N.E. Coast	1 7½	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	•1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_2	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_2	Chatham ..	S. Counties	1 5	1 0½
B_2	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A	Consett ..	N.E. Coast	1 7½	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	.....	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	•1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	•1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	•1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	•1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	•1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	•1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

• In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1*s.* 4*d. per hour;* LABOURER, 1*s.* 4*d per hour;* NAVVY, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

	£	s.	d.
Broken brick or stone, 2 in., per yd.	0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1*s.* 9*d. each and credited when returned at* 1*s.* 6*d.*

Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5

DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.

If left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0

DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.

LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete 4-2-1 in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* BRICKLAYER, 1*s.* 9*d. per hour;* PLUMBER, 1*s.* 9*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour.*

London stocks, per M.	£4	5	0
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¼ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	6
Firebricks, 2½ in., per M.	9	0	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1*s.* 9*d. per hour;* DO. *fixer,* 1*s.* 10*d. per hour;* LABOURER, 1*s.* 4*d.* per hour; SCAFFOLDER, 1*s.* 5*d. per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	6
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1*s.* 9*d. per hour;* TILER, 1*s.* 9*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies				£13	0	0
Countess				25	0	0
Duchess				32	0	0
Old Delabole	*Med. Grey*			*Med. Green*		
24 in. × 12 in.	£42	11	3	£45	1	0
20 in. × 10 in.	31	4	3	33	0	6
16 in. × 10 in.	20	18	0	22	4	9
14 in. × 8 in.	12	1	0	12	16	3
Green Randoms, per ton				8	3	9
Grey-green do., per ton				7	3	9
Green peggies, 12 in. to 8 in. long, per ton				5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2

Cement and sand, see "Excavator," etc., above.

Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey			Med. Green		
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies, 12 in. to 8 in. long				4	13	6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1*s.* 9*d. per hour;* JOINER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Timber, average prices at Docks, London Standard			
Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	4
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	3
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	9
DO. framed in floors, roofs, etc., per ft. cube	0	5	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO. 3-ply per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour*; MATE, *do.* 1*s.* 4*d. per hour*; ERECTOR, 1*s.* 9½*d. per hour*; FITTER, 1*s.* 9½*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour*; MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc. per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour (plus allowances in London only)*; LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in. up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; FRENCH POLISHER, 1*s.* 9*d. per hour*; PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. *The measured work price is on the same basis per ft. sup.*	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. from 3d. to	0	0	6
Plaster-board, per yd. sup. from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. from	0	2	8
Asbestos sheeting, $\frac{5}{32}$ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, $\frac{5}{32}$ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	$\frac{3}{16}$ in.			¼ in.			$\frac{3}{8}$ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	3	5	4	3	7½	6	4½	8½	7	6
Alder	5½	3	3	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, JULY 31

R.I.B.A. Visit to U.S.A. En route Montreal, passing Thousand Islands. Arrival at Montreal 5.45 p.m. Accommodation at Windsor Hotel.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. Discussion to be opened by F. W. Burrows, M.H.I., on "The Qualities and Duties of Art School Head Mastership." **2.30 p.m.**

THURSDAY, AUGUST 1

R.I.B.A. Visit to U.S.A. Motor sightseeing in the city of Montreal. Departure for Quebec via Canadian National Railways at 5.10 p.m. Arrival at Quebec 9.55 p.m. Accommodation at Chateau Frontenac Hotel.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Pottery." By L. O. Faraker. "Tudor and Jacobean Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Stained Glass." By T. F. Wilson, F.R.S.A.I. 3 p.m. Lecture Theatre. "Modernism in Art." Lantern Lecture by Alfred H. R. Thornton, M.A. 2.30. "Evolution of the Chair." By T. F. Wilson F.R.S.A.I. 7 p.m. **12 noon.**

FRIDAY, AUGUST 2

R.I.B.A. Visit to U.S.A. Motor tour from Quebec to the famous shrine of Ste. Anne de Beaupré, returning by way of Montmorency Falls. Embark in evening on s.s. "Ascania."
WALLACE COLLECTION, Manchester Square, W.1. "French Life and Art." By W. P. Gibson. **3 p.m.**

SATURDAY, AUGUST 3

Sunrise, 5.26. Sunset, 8.46.
IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY, Imperial Institute Road, South Kensington, S.W.7. Exhibition of Royal Society of Arts Competition of Industrial Designs, 1929. Open daily until September.

SUNDAY, AUGUST 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Gifts through the National Art Collections Fund." By Miss E. M. Spiller, O.B.E. 2.45 p.m. "Beauty of Colour." By Miss E. M. Spiller, O.B.E. **4 p.m.**

MONDAY, AUGUST 5

Bank Holiday.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. 12 noon. General Tour. By L. O. Faraker. "English Furniture." By T. F. Wilson, F.R.S.A.I. 3 p.m. General Tour. By L. O. Faraker. **12 noon.**

TUESDAY, AUGUST 6

TOWER OF LONDON, Martin Tower. "The Tower in Stuart Times and After." By Allen S. Walker. **11 a.m.**
NATIONAL PORTRAIT GALLERY, Trafalgar Square. "The Foundation of the Royal Academy." By John Steegmann, M.A. **3 p.m.**

WEDNESDAY, AUGUST 7

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.1. Indian Section: "Architecture." By Miss M. Chamot. **3 p.m.**

THURSDAY, AUGUST 8

VICTORIA AND ALBERT MUSEUM, South Kensington. S.W.7. "Architecture." By L. O. Faraker. 3 p.m. "Recent Acquisitions." By Miss M. Chamot. **7 p.m.**
BRITISH MUSEUM, W.C.1. "Origins of Architecture—I (Greek)." By Cecil Hallett, B.A., F.S.A. **12 noon.**

FRIDAY, AUGUST 9

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. **12 noon.**

SATURDAY, AUGUST 10

Sunrise, 5.37. Sunset, 8.33.
R.I.B.A. Visit to U.S.A. s.s. "Ascania" due to arrive at Plymouth.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. 12 noon. Indian Section: "Sculpture." By Miss M. Chamot. 3 p.m. **12 noon.**

SUNDAY, AUGUST 11

R.I.B.A. Visit to U.S.A. Arrival of s.s. "Ascania" at London.

MONDAY, AUGUST 12

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Furniture (I)." By Miss M. Chamot. 12 noon. "English Furniture (II)." By Miss M. Chamot. 3 p.m. **12 noon.**

TUESDAY, AUGUST 13

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Sculpture." By Miss M. Chamot. 12 noon. "English Primitives." By Miss M. Chamot. 3 p.m. **12 noon.**

WEDNESDAY, AUGUST 14

NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Some Caricaturists." By John Steegmann, M.A. **3 p.m.**

SATURDAY, AUGUST 17

Sunrise, 5.47. Sunset, 8.20.
HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, Excursion.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By L. O. Faraker. 3 p.m. "Italian Renaissance Furniture." By L. O. Faraker. 7 p.m.
WALLACE COLLECTION, Manchester Square, W.1. "French Furniture." By W. P. Gibson. **12 noon.**

MONDAY, AUGUST 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. "Spanish Architecture and Sculpture." By Miss M. Chamot. 12 noon. "Spanish Textiles and Pottery." By Miss M. Chamot. 3 p.m. **12 noon.**

TUESDAY, AUGUST 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Tapestries." By Miss M. Chamot. 3 p.m. **3 p.m.**

WEDNESDAY, AUGUST 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Stained Glass." By Miss M. Chamot. **12 noon.**

THURSDAY, AUGUST 22

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Renaissance Furniture." By L. O. Faraker. "Etching." By Miss M. Chamot. **7 p.m.**
BRITISH MUSEUM, W.C.1. "Origins of Architecture—II (Roman)." By Cecil Hallett, B.A., F.S.A. **12 noon.**

FRIDAY, AUGUST 23

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By Miss M. Chamot. 12 noon. "Byzantine Art." By Miss M. Chamot. 3 p.m. **12 noon.**

SATURDAY, AUGUST 24

Sunrise, 5.58. Sunset, 8.5.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Eighteenth Century Furniture." By L. O. Faraker. 7 p.m. "Italian Decoration." By Miss M. Chamot. 7 p.m. **7 p.m.**

MONDAY, AUGUST 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By Miss M. Chamot. 12 noon. "Northern Sculpture." By T. F. Wilson. 3 p.m.
SCIENCE MUSEUM, South Kensington, S.W.7. "Noteworthy Engineering Achievements." By L. W. Phillips, M.I.E.E., A.INST.P. 3 p.m. **12 noon.**

TUESDAY, AUGUST 27

NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Architects from Wren to Adam." By John Steegmann, M.A. **3 p.m.**
WALLACE COLLECTION, Manchester Square, W.1. "French Furniture." By W. P. Gibson. **3 p.m.**

WEDNESDAY, AUGUST 28

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Arts and Crafts." By T. F. Wilson, F.R.S.A.I. 3 p.m.
NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Some Later Architects." By John Steegmann, M.A. **3 p.m.**

THURSDAY, AUGUST 29

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. **3 p.m.**

FRIDAY, AUGUST 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By L. O. Faraker. 12 noon. "Chippendale." By T. F. Wilson F.R.S.A.I. 3 p.m. **12 noon.**

SATURDAY, AUGUST 31

Sunrise, 6.10. Sunset, 7.50.
A.A.S.T.A. Summer Tour to the Rhineland via the Ardennes and the Moselle. From the evening of August 31 to September 8 or 12.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Furniture of the Seventeenth Century." By L. O. Faraker. 12 noon. "English Furniture of the Eighteenth Century." By L. O. Faraker. 3 p.m. Indian Section. "Mogul Art." By T. F. Wilson. 3 p.m. "Eighteenth-century Furniture." By T.F. Wilson, F.R.S.A.I. 7 p.m. **12 noon.**

MONDAY, SEPTEMBER 2

WALLACE COLLECTION, Manchester Square, W.1. "English Portraits." By W. P. Gibson. **3 p.m.**
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Costumes." By L. O. Faraker. 12 noon. "Costumes of Seventeenth Century." By L. O. Faraker. **12 noon.**
BRITISH MUSEUM, W.C.1. (A) "Monuments of Egypt." (B) "Monuments of Assyria." By Official Guide Lecturers. **3 p.m.**

WEDNESDAY, SEPTEMBER 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

THURSDAY, SEPTEMBER 5

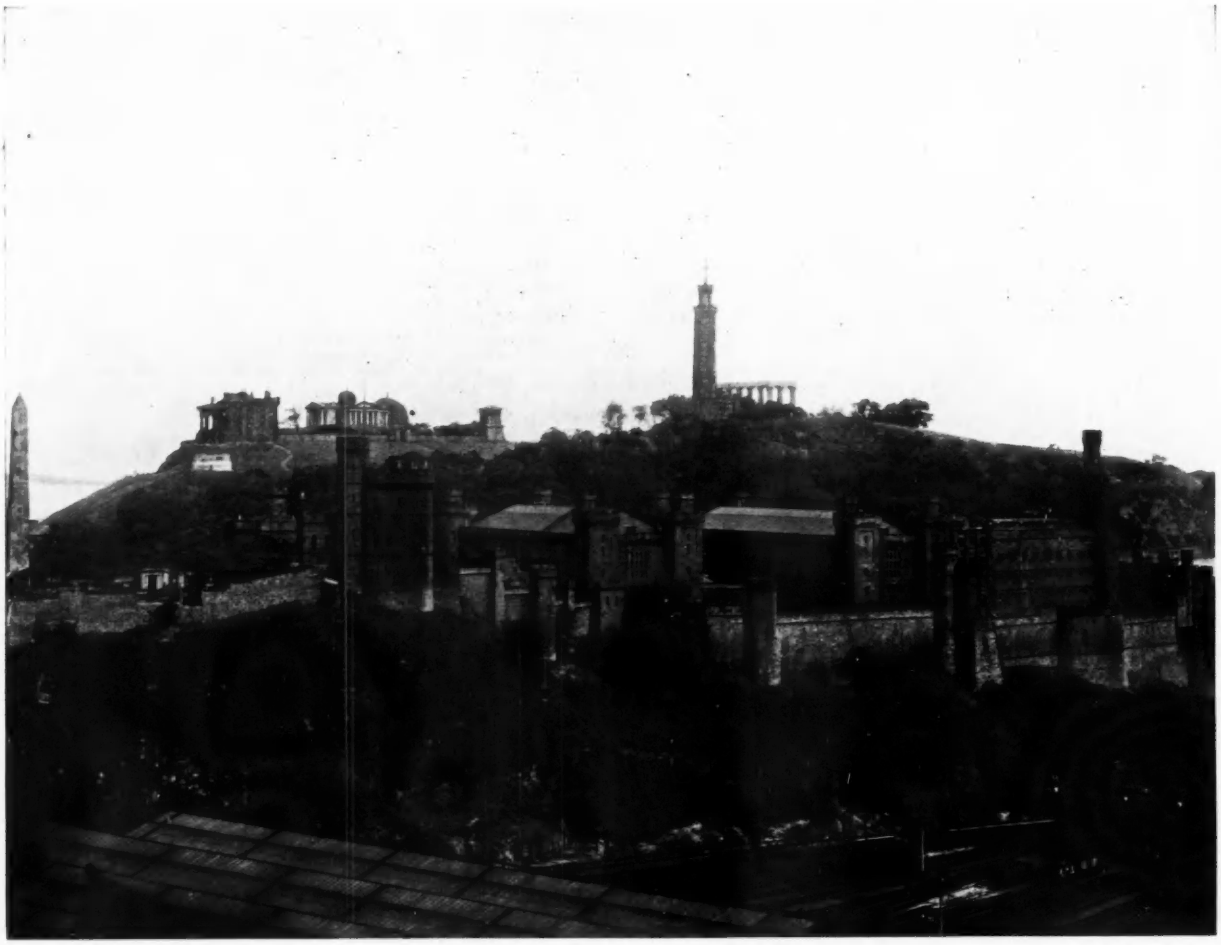
BRITISH MUSEUM, W.C.1. "Origins of Architecture—I (Greek)." By Cecil Hallett, B.A., F.S.A. 12 noon. "Early Britain—I (Old Stone Age)." By Cecil Hallett, B.A., F.S.A. 3 p.m. **12 noon.**

FRIDAY, SEPTEMBER 6

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 7

Sunrise, 6.21. Sunset, 7.34.
BRITISH MUSEUM, W.C.1. "Early Britain—II (Late Stone Age)." By Cecil Hallett, B.A., F.S.A. **12 noon.**



CALTON HILL AND JAIL, EDINBURGH: A MONUMENTAL SITE.

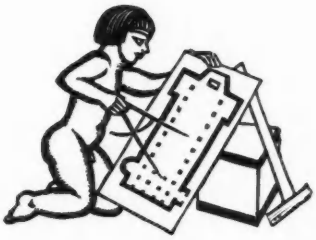
Calton Hill is already a monumental site, in a literal as well as in a figurative sense, since it bears on its height the National Monument, and, somewhat to the left and indistinguishable in the picture, Nelson's Monument, to say nothing of the obelisk. And the Burns Monument is within a stone's-throw.

But it is around the site at present covered by the buildings of H.M. Prison, footed in its lower crags, that controversy centres. Calton Jail is, in fact, to be pulled down, and the question is whether what is to take its place is to remain a matter of Government architecture, the sole concern of the Office of Works, or to be the subject of an open competition.

In this photographic study, specially taken to give point to the arguments advanced in the leading article on the facing page, the prospect is viewed from above Waverley Railway Station, a corner of the roof of which appears on the left, with the lines running into it. The City Observatory, with its dome, may be identified on the hill.

See the leading article on the facing page.

THE ARCHITECTS' JOURNAL



WEDNESDAY, JULY 31, 1929

THE BATTLE OF CALTON JAIL

"Now's the day, and now's the hour,
See the front o' battle lour."
ROBERT BURNS: *Bannockburn.*

THE Calton Hill dominates the plan of Edinburgh from two notable directions. It is in effect the necropolis of this "Athens of the North," and upon it have been placed monuments that close vistas down streets as finely conceived and as boldly carried out as any in the world.

Below Calton Hill, and at the extreme end of Prince's Street, stands today a prison which is to be pulled down in order to provide a site for new Government buildings. This site is in some senses not strategic, because it is invisible from Prince's Street, and stands in inferior relation to the co-ordinated street plan of the city. Nevertheless, it plays, or can be made to play, an important part, both from the direction of the street that passes between it and the rising ground of Calton Hill, and from the direction of North Bridge, whence it is seen to stand high above the level of the railway that issues from Waverley Station.

For these reasons, and because it is a rocky, irregular, and on one face, precipitous site, it presents difficulties which imagination, and only fine imagination, may hope to overcome and turn to noble purposes.

Even from the single aspect presented, by way of frontispiece to this issue, on the facing page, it will be gathered that there is an opportunity here to build something good enough to bridge the deep gulf that separates us from those who first planned those parts of Edinburgh that have made it the most architecturally civilized town in Britain.

Edinburgh has made many mistakes since the flame that burned high in the eighteenth and early nineteenth centuries flickered with the coming of railways and went out in the black rush of Victorian prosperity. We are only now learning to appreciate the force of imagination that produced the two great town plans of Haig's and Playfair's, and it is still only too common to find the layout of sites which form the subjects of carefully deliberated competitions entrusted to the care of surveyors and engineers just because the co-ordinated mind is not yet ours.

On this site by Calton Hill expensive and important buildings are to be placed. Unless the Government yields to the suasion voiced by the past and present presidents of the R.I.B.A., on behalf of the profession and, indeed, in this case, all who have the interests of architecture at heart, it is intended to allow a Government department to design these buildings. In which case, Edinburgh, that once drew up its own competitions to promote the best interests of its citizens, and stands as a proud example of civic planning, will be given whatever a Government department can give.

We have shown here that the site demands imagination and planning ability of the first order, and that nothing short of the best brains that can be found should be allowed the opportunity of making this unique addition to the story of architecture in Edinburgh. Is this fine chance to become a matter of Government routine? Is the Office of Works to fling off a design like a tasty morsel to the starving North?

Surely here the principles of open competition that have governed the selection of designs for all really important buildings are reinforced by considerations leaving no room for the exercise of the departmental function?

Regarding the site as a prison to be demolished and a building to take its place, a Government might easily slip the thing into the hoppers of its mechanical system and turn out a building at its latter end. But it is not this; it is something so much more important to Edinburgh and to the country at large that if steps are not taken, by means of open competition, to find the best design, the noblest possibilities of a magnificent site will be buried under a dead weight of traditional precedent, and the healthy progress of architecture will be wilfully retarded.

NEWS & TOPICS

DRAWBACKS AT CHARING CROSS

THE latest and apparently the final scheme for Charing Cross Bridge, settled out of court by the Southern Railway, L.C.C., Ministry of Transport, and Sir Edwin Lutyens, will make permanent conditions that we thought to destroy. The great road-viaduct is to start on south bank and north from two unhappily shaped squares, rising from the level of the ground to blot out light and air from a great deal of property, as do the old railway viaducts. In order to get safely to earth the road has to wiggle at each end in a very unmonumental way; and indeed, the more I look at it the more plainly I perceive that it were better that another year's scrutiny of these proposals, that are a declension from the ultra-complications of the Lee Commission scheme, should perhaps bring about the absolute simplification which I see now is the only solution. Surely there is too much stress on traffic. Surely the traffic of the Embankment that the bridge avoids is as nothing to the traffic it meets in the Strand. And will not the state of these uncomfortable squares be worse than anything we can conceive, with all the traffic of the bridge impinging at one corner as though that traffic along the Strand were nothing? Traffic must meet traffic somewhere. Why not on the Embankment, where at any rate there is no influx on the river side but that that comes from the bridge? It is a simple thought worth placing side by side with the proposals that are held to be the only way of dealing with the chronic state of things.

*

A CENTURY-OLD ARCHITECT'S "SIGNATURE"

There are many reasons in favour of architects signing their own buildings. Quite apart from the doubtful personal satisfaction to the architect of being known as the author of any particular building, there is the educative effect upon a public who may know from the inscription on the wall that the building is by Mr. Triglyph Transome, A.R.I.B.A., a real and living person. Historically it will be of importance as tending to diminish the extent of correspondence on the authenticity of old buildings. Names and dates supplied *in situ* will not only make the authorship clear, but provide, over a period, means of corroboration, analysis, and comparison of much value to the historian and student. In Liverpool it is intended to make good the omission of a century by fixing a plaque or carving the name of the architect, C. Rampling, who in 1837 built the Liverpool Medical Institution, Mount Pleasant. This is a fine piece of work that has been noticed only by architects and a few observant and cultured people. It is black and dirty, as most old Liverpool buildings are, and it might quite easily be demolished by the type of person who today rules us in councils' and surveyors' offices. Honoured, though posthumously, it may take on new life and speak again to that poor thing, "the man in the street," and tell him what sort of thing he should admire.

*

VENTILATION IN THE EIGHTEENTH CENTURY

The picture of old Newgate Prison, reproduced from a Life of Stephen Hales, D.D., F.R.S., by A. E. Clark-Kennedy (Cambridge University Press), is remarkable because it



An eighteenth-century device for ventilating Newgate Prison, invented by Dr. Hales.

shows the windmill mechanism of a system of forced ventilation, the device of a man whose inventive and observant mind was matched by an uncommon benevolence and love of good works. The terrible conditions of life aboard ships and in the prisons of the eighteenth century led Dr. Hales to perfect a method of extracting air from overheated rooms which, it must be noted, differed in no essentials from the equally simple, if rather more costly, methods employed today.

*

In the first instance, he used man-power to turn the extraction fans, and the idea of making the wind do the work overtook the failure of the prison authorities to keep up to scratch. Finally, even the windmills were allowed to become derelict, while a growing sense of public shame rose to destroy the whole system of prisons, which manufactured more crime than they prevented, but not before the good doctor's ventilators had brought some measure of clean air to prisons and men-of-war not only in England but abroad. The story of this man's life should be read immediately after reading Aldous Huxley. It is a good ventilator.

*

DAMPNESS: *VIDE* BAD BUILDING

I do not think that there are many to doubt that dampness in buildings is productive of many forms of rheumatism. The R.I.B.A., working in conjunction with the British Medical Association, have issued a detailed report based upon the findings in some 1,067 houses, fifty-three of which were of post-war construction. Their verdict is unpalatable. Dampness is widespread: "the high

proportion of reported cases due to the absence of, or defects in, dampcourses in new houses is surprising." The desire to build houses as quickly as possible has led to the relaxation of by-laws, while the enormous volume of work has tended to dilute the strictness of official and other supervision, with the result that proper attention has not been paid to this important item and dampness is become as prevalent in new buildings as in old. A comparison of post-war and pre-war houses only goes to prove that defective construction, that is, *bad building*, is at the root of the matter. The architect is responsible for only 13 per cent. of residential houses erected, and it would be safe to say that his supervision is a very efficient safeguard against dampness. Nevertheless, it is well that he should know the risks. The Editor tells me of forthcoming articles on the subject.

*

BOULEVARDS FOR STREETS

It has taken many years for the sense of public ownership and its responsibilities to penetrate the general mind, but it can be said in fairness to the public that the time has arrived when the railings of public parks can safely give way to a more open and generous treatment. There is, of course, the example of the London squares, which have been without a doubt protected from violation by their railings. But, with greater appreciation of green spaces, we have today fewer amenities. Our streets should be made into boulevards by the inclusion of what railed space lies adjacent. Hyde Park, the Green Park along Piccadilly, and many other similarly situated open spaces might, by moving the railings 30 ft. inwards, if not by removing railings entirely, make boulevards of what are only streets.

*

"ARCHITECT TO THE FILMS"

Mr. Edward Carrick was full of enthusiasm, when I met him recently, about the opportunities for realizing artistic verity in connection with the films. Heaven knows, many of them lack it ! And no doubt he is right in thinking that is why people with artistic consciences, like architects, have not, so far, taken the cinema very seriously, and have held themselves aloof. But it has come to stay, and I am inclined to agree that it is up to us to do what comes our way to raise its status. Many fine cinema theatres have been designed; but probably few have thought of designing the actual scenes that are to be photographed. Mr. Carrick is to tell this week's readers how it is done. And, incidentally, there is word of a new wide-film method of photography and projection that will make for bigger screens—fifty to seventy feet wide—and the showing of all scenes " life-size " or thereabouts.

*

HOT WATER

It is not every day, even in this hectic age, that a vision so fantastic as the direct heating of a liquid by a naked flame, so to speak, is reduced to practical politics. That is what has been done by Mr. Hammond, with his invention for " submerged combustion." Obviously this is something that the architect will want to know about, for does not central heating at once jump to the mind, and is it not one of his common preoccupations ? I have read, in proof, the account of it that is to appear elsewhere in this issue, and it fires my imagination.

*

RICHMOND'S CONCRETE BRIDGE

It will be remembered that Mr. Maxwell Ayrton's design for a new concrete bridge at Richmond met with less approval than it deserved, and that the Fine Arts Commission reported heavily against it, as likely to damage the quiet and peaceful surroundings of the river. The design was undoubtedly an overstatement. It was too big; its towers too discordant; and its *tout ensemble* too ill-digested a version of the modernist manner to find favour in any quarter. On the other hand, it was most distinctly an attempt to design in concrete, and was, I thought, capable of further study and artistic simplification, with every chance that it might emerge a fine bridge and a well-reasoned piece of abstract design. It is unfortunate for Mr. Ayrton that neither from the Fine Arts Commission (with one individual exception) nor from the general public was any reasoned criticism given. Criticism was biased towards a sentimental attachment to the Thames, and has produced therefore what Mr. Ayrton was forced to supply —a design in which association and sentimentality have played the very devil with good thinking. I like the accepted design less than the first. ASTRAGAL



Richmond's new concrete bridge. This perspective drawing, by Mr. Maxwell Ayrton, illustrates the revised design he has prepared, which has now been accepted.

PRINCE'S GATE COURT

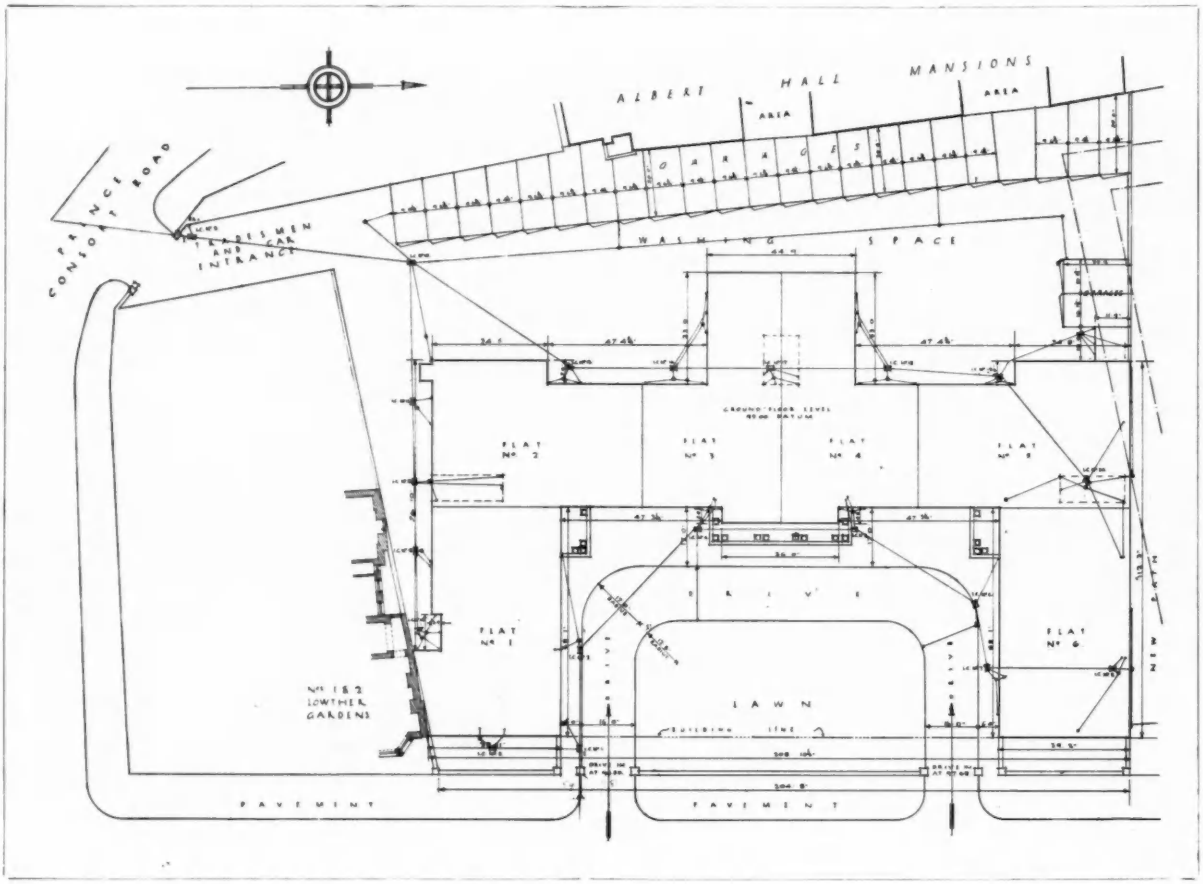
New Flats

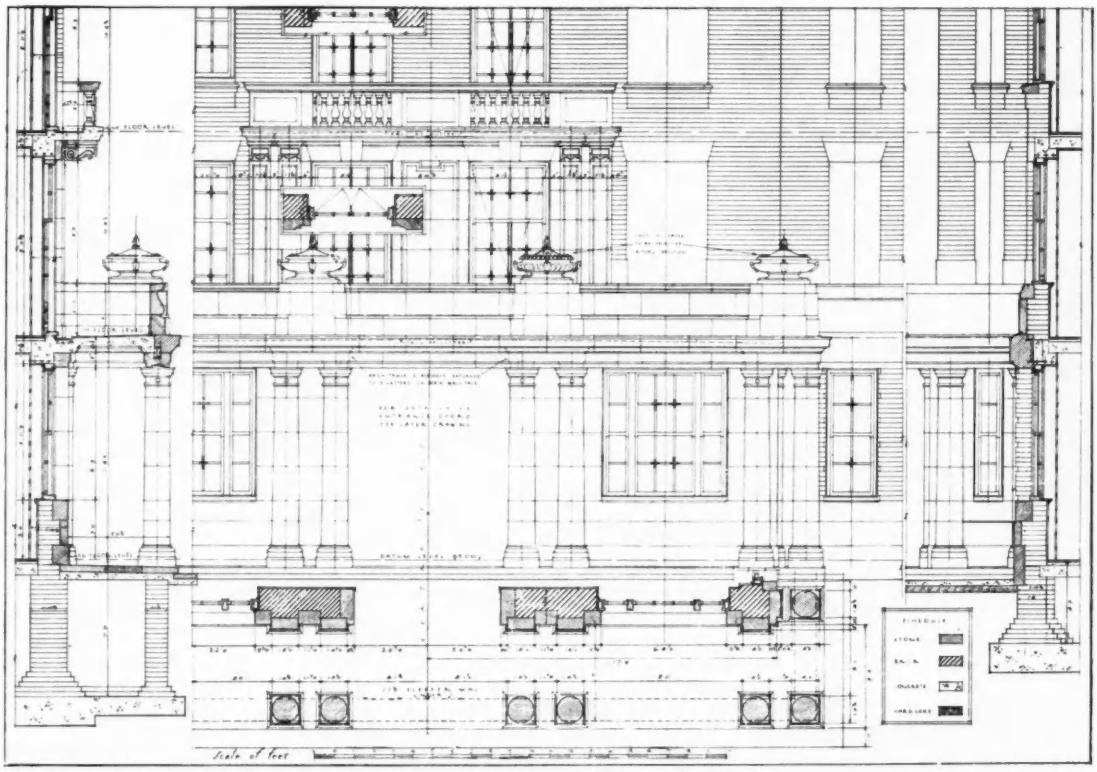
DESIGNED BY
T. P. BENNETT
AND SON



Prince's Gate Court, of which a general view and the layout plan are shown on this page, stands at the northern end of Exhibition Road, Kensington. The building is planned on three sides of a spacious courtyard, open to Exhibition Road, and provides flats for an exclusive residential district. The courtyard contains a lawn, a carriageway, flowerbeds, and shrubs. There are lock-up garages at the rear of the site, approached by a separate entrance from Prince Consort Road.

PRINCE'S Gate Court stands at the northern end of Exhibition Road, Kensington, W., on a site adjoining the grounds of the Royal Geographical Society. It has been planned to meet the special needs of that exclusive residential district. Two types of flats are provided: one of five bedrooms, the other of four. Each flat is similar in architectural character, planning, and height; and includes a hall, drawing- and dining-rooms, kitchen, service lobby, cloakroom, two maids' bedrooms, maids' bathroom, and adequate cupboard accommodation. The



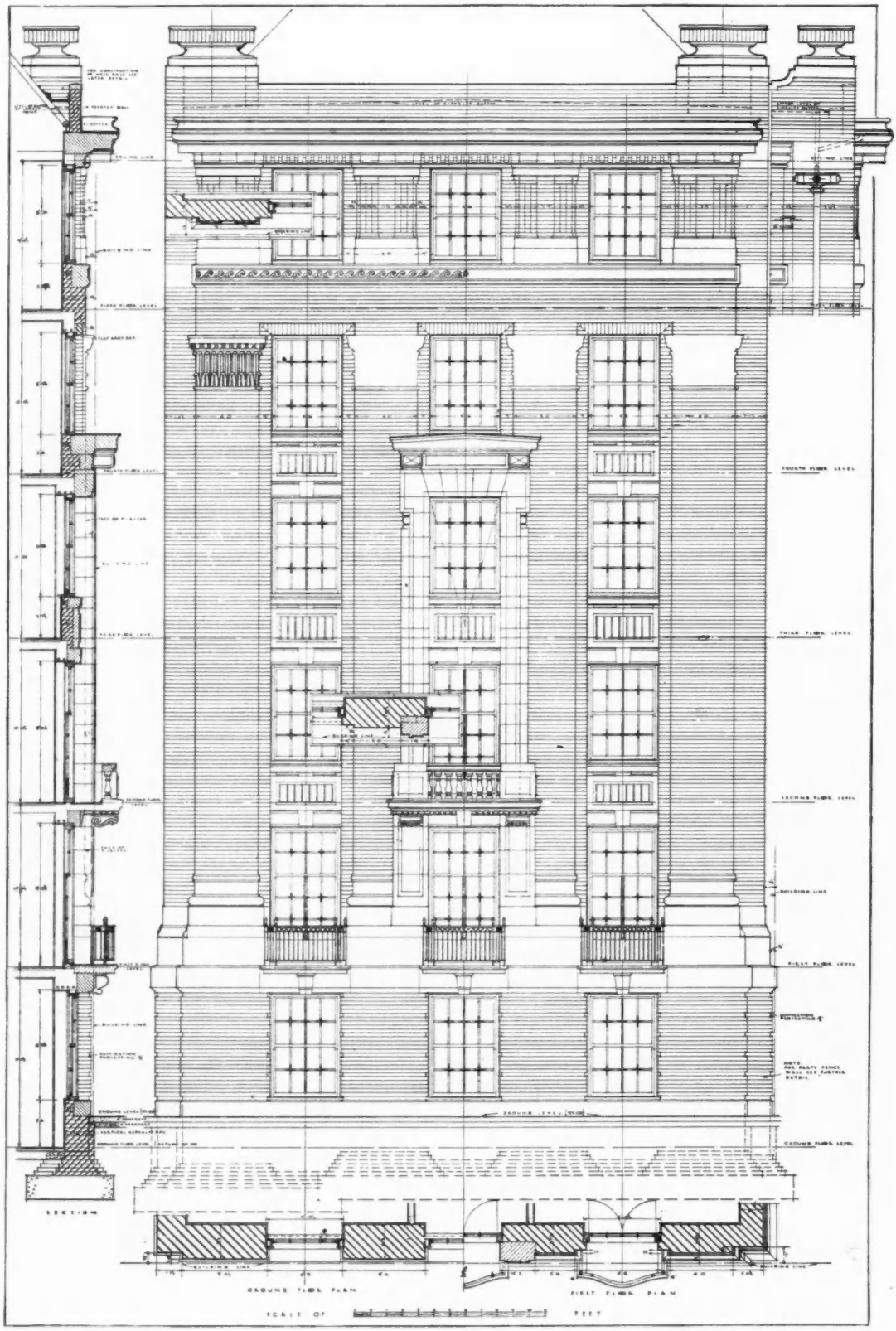


This architects' working drawing of the main central entrance should be compared with the photograph reproduced below. There are three main entrances, planned on the inner side of the courtyard and served by a drive from Exhibition Road.



Prince's Gate Court, W.] [*By T. P. Bennett and Son.*

A stone treatment with porticoes punctuates the three main entrances. The central entrance shown is the most imposing, and is balanced on either side by entrances of the design illustrated in the general view on the facing page.



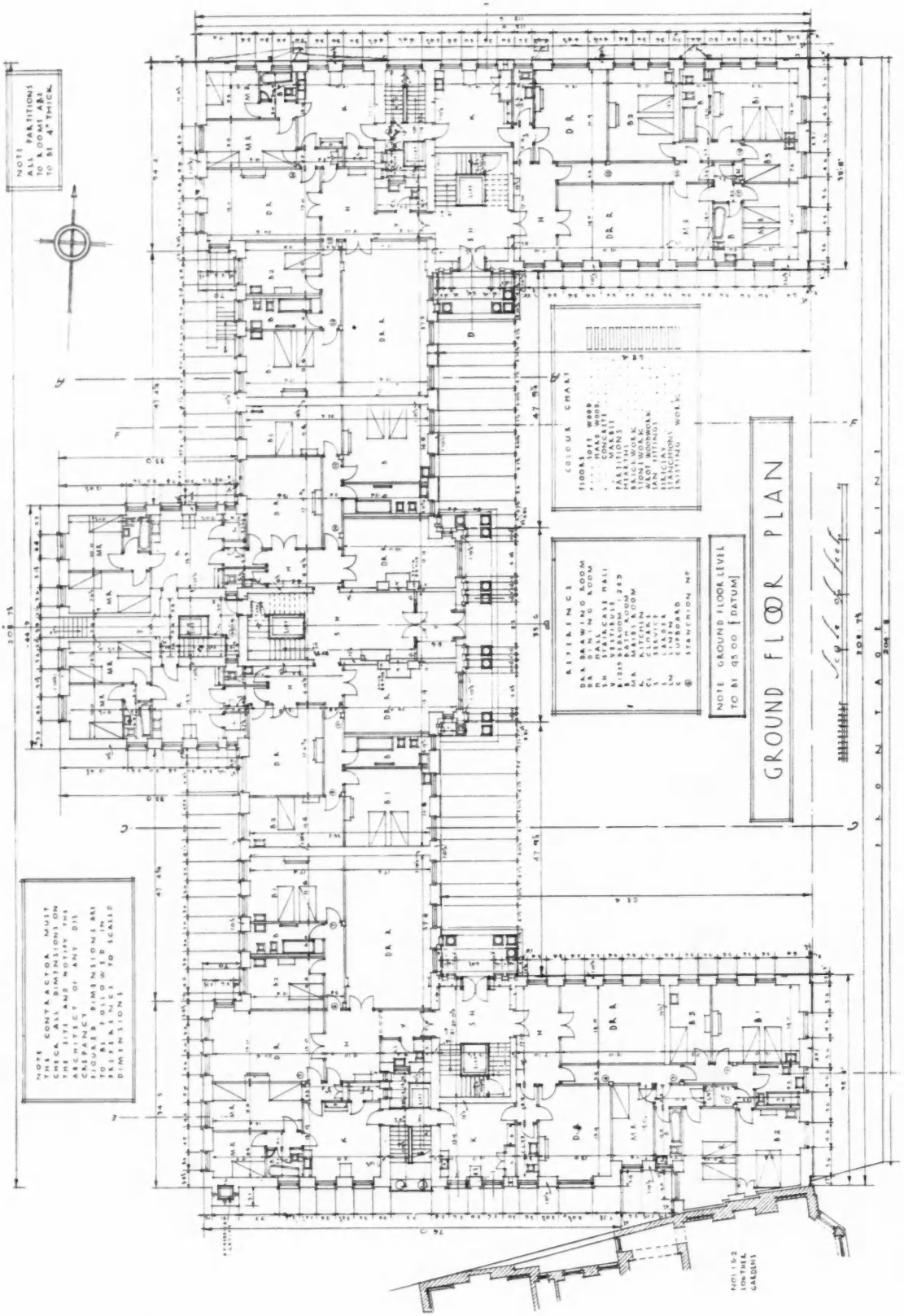
Prince's Gate Court, W.] [*By T. P. Bennett and Son.*

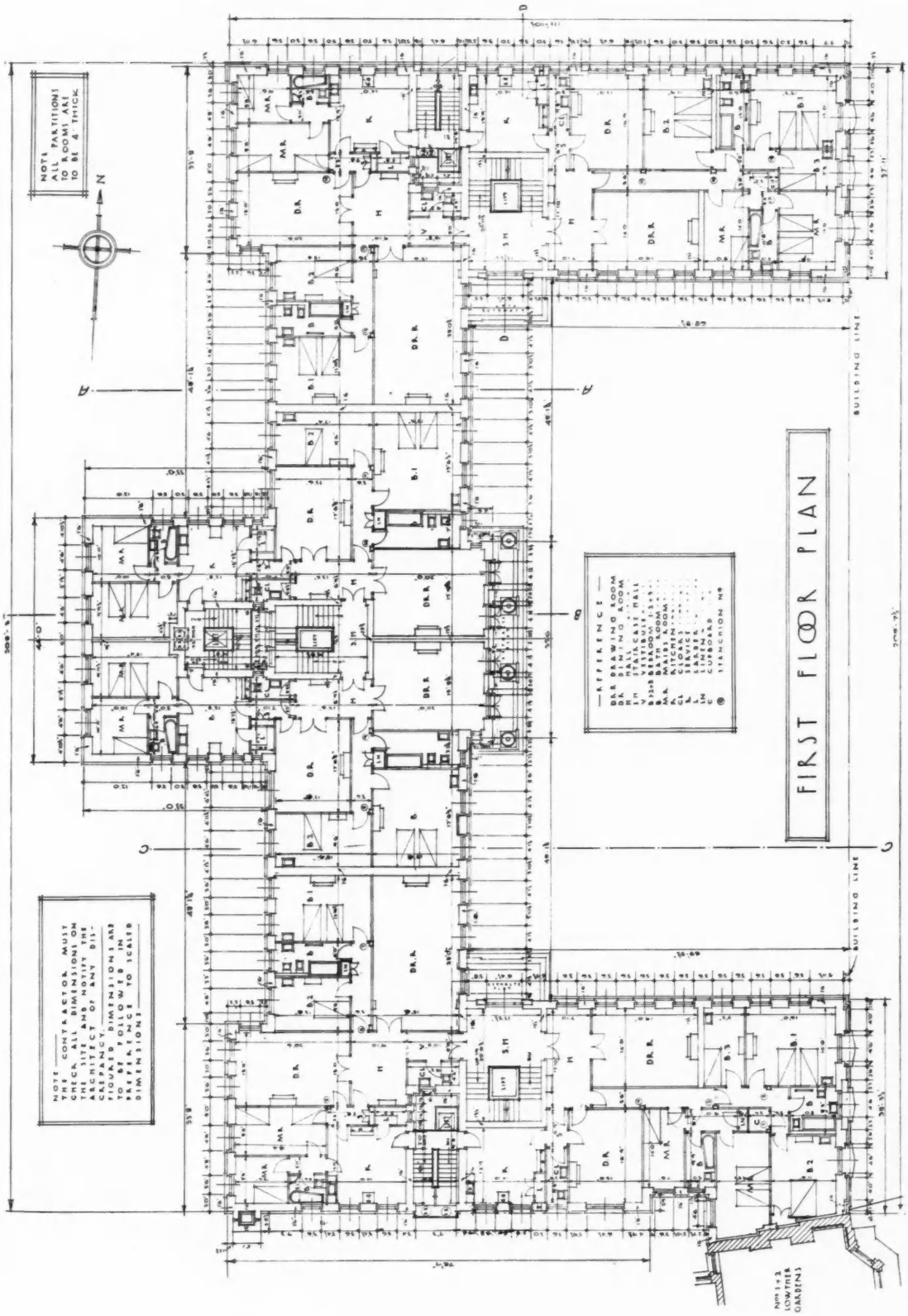
The architects' working drawing of the north wing front to Exhibition Road. Both wings are of similar design. Five- and four- bedroomed flats, each with hall, drawing- and dining-rooms, are provided. In the roof of the building are twenty-one additional rooms for maids.



Prince's Gate Court, W.] [*By T. P. Bennett and Son.*

The north wing photographed from Exhibition Road. A simple English Renaissance style has been expressed in the principal elevations by the use of rich multi-coloured facing bricks, which contrast pleasantly with the Portland stone porches, windows, and balconies.


GROUND FLOOR PLAN
NOTE ALL PARTITIONS TO ROOMS ARE TO BE 4½" THICK.
NOTE CONTRACTORS MUST CHECK ALL DIMENSIONS THE SITE AND NOTIFY THE ARCHITECT OF ANY DIS CREPANCY DIMENSIONS ARE FIGURED DRAWING IS TO SCALE PRINTED TO SCALE DIMENSIONS
NOTE GROUND FLOOR LEVEL TO BE 95.00 [DATUM]
REFERENCE
COLOUR CHART
FINISHES
PARTITIONS
BRICK WORK
STONE WORK
ROUGH BRICKWORK
IRON FITTINGS
ELEVATIONS
EXISTING WORK
DRAWING ROOM
DINING ROOM
HALL
MAIN CASE MAIL
VESTIBULE
BEDROOM
MAISONETTE
KITCHEN
SCULLERY
LAVATORY
CUPBOARD
STANCHION
DR A
DR B
DR C
DR D
DR E
DR F
DR G
DR H
DR J
DR K
DR L
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DR N
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Prince's Gate Court, W.] *[By T. P. Bennett and Son.*

The first-floor plan. Each flat comprises hall, drawing- and dining-rooms, two maids' bedrooms, and maids' bathroom, kitchen, service lobby, cloakroom, and adequate cupboard accommodation. The five-bedroomed flats have three principal bedrooms and bathroom; the four-bedroomed, two principal bedrooms and bathroom. Additional bedrooms for maids are provided in the roof.



Prince's Gate Court, W.]

The interior of the main central entrance hall, like the two other Early Italian style. The exterior of the central entrance



View on the second-floor landing of the central block, showing the principal staircase, lift enclosure, and entrance to a flat.

five-bedr
bathroom
bedrooms
bedrooms
guest. In addition, there are twenty
bedrooms for maids in the roof.

As will be seen from the plans on pages
flats are disposed on three sides of a co
Exhibition Road, and are entered from
trances approached from a carriage drive
leading from the road. The courtyard is la
lawn, and also contains flower-beds and sh

The pri
Renaissance style aptly expressed in r
facing bri
main entrances are made the most im
of the courtyard fronts, and are empha
punctuated by Portland stone dressings and porticos. The two main entrances facing, respectively, the north-east and south-east corners of the courtyard are of similar design. One of these entrances can be seen in the photograph on page 158. For the central main entrance a different architectural treatment is adopted, as shown on page 159.

The entrance halls are designed in the Early Italian style and are served by wide, easy-going staircases and electric lifts. In addition, service stairs and service passenger lifts are provided for the tradesmen. The principal lift enclosures are bronzed, and the entrance doors to the flats are double folding, and panelled in oak.

At the rear of the flats are twenty-five lock-up garages and a washing-space approached by a separate entrance in Prince Consort Road.



GLISH
ECEDENT
No. 75

CLOCK HOUSE,
ROCHESTER,
KENT

Quite close to the Guildhall is the Clock House, presented in 1706 by Sir Cloudesley Shovel to the town he represented in three Parliaments. The façade is a good deal taken up with doorway and an enormous clock, and, in its present state, the windows perform less than their share in the total effect. The carved consoles, spandrils, and support to the clock cantilever are extremely rich, heavily gilt, and coloured.—[E. MAXWELL FRY.]



This general view of the main front to Station Road, Beaconsfield, should be compared with the drawing on page 169.

CINEMA THEATRE AT BEACONSFIELD

DESIGNED BY LEATHART AND GRANGER

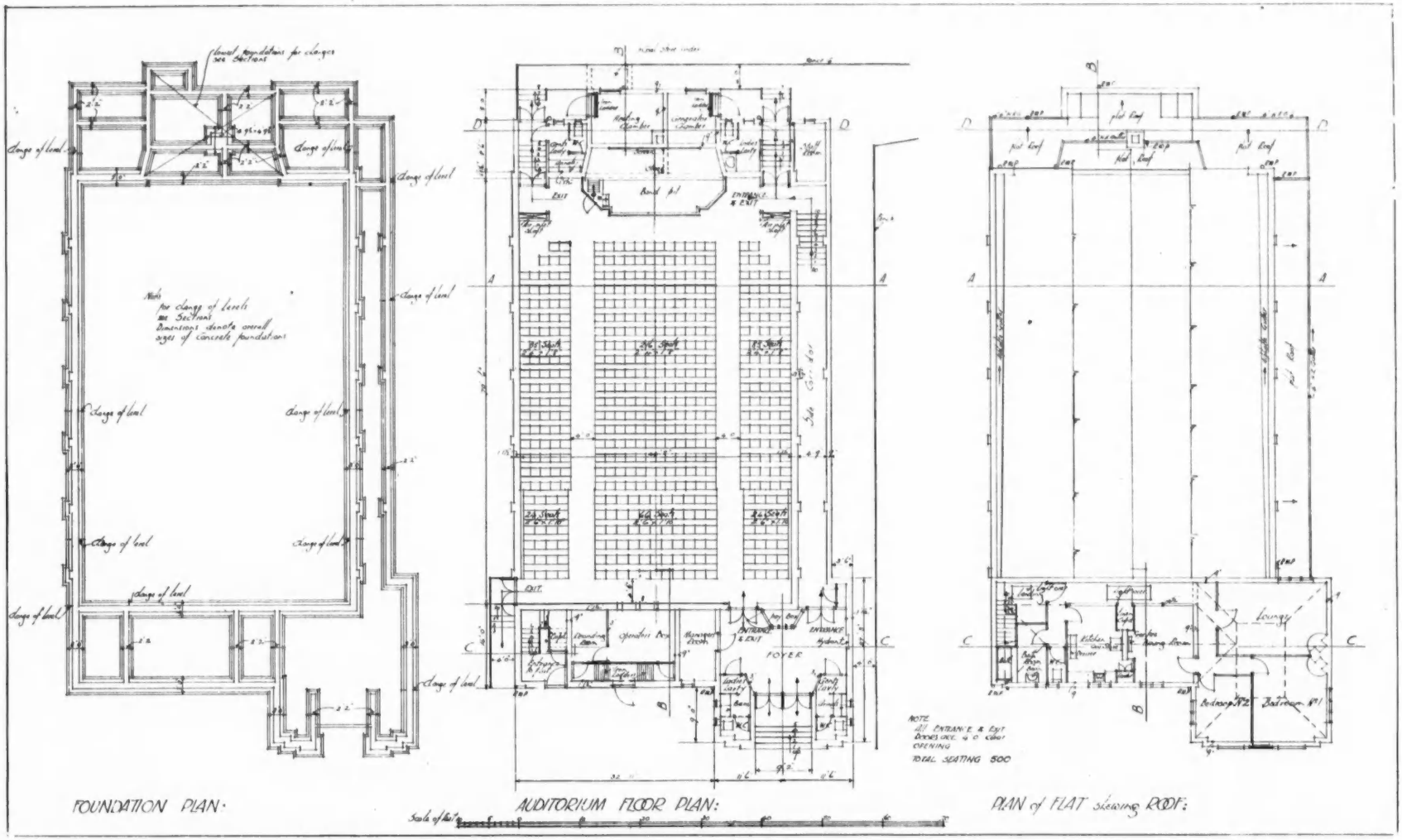
This cinema of modest size was designed to harmonize with adjacent buildings, including Council offices, carried out in the Georgian style. It is faced with multi-coloured bricks, with stone dressings, and has a steel-trussed roof covered with green Cornish slates and metal casement windows. The building (which provides a residential flat of four rooms and offices) together with decoration, cost £8,200.



The entrance hall and pay-box, showing the modern character of the decorative work.

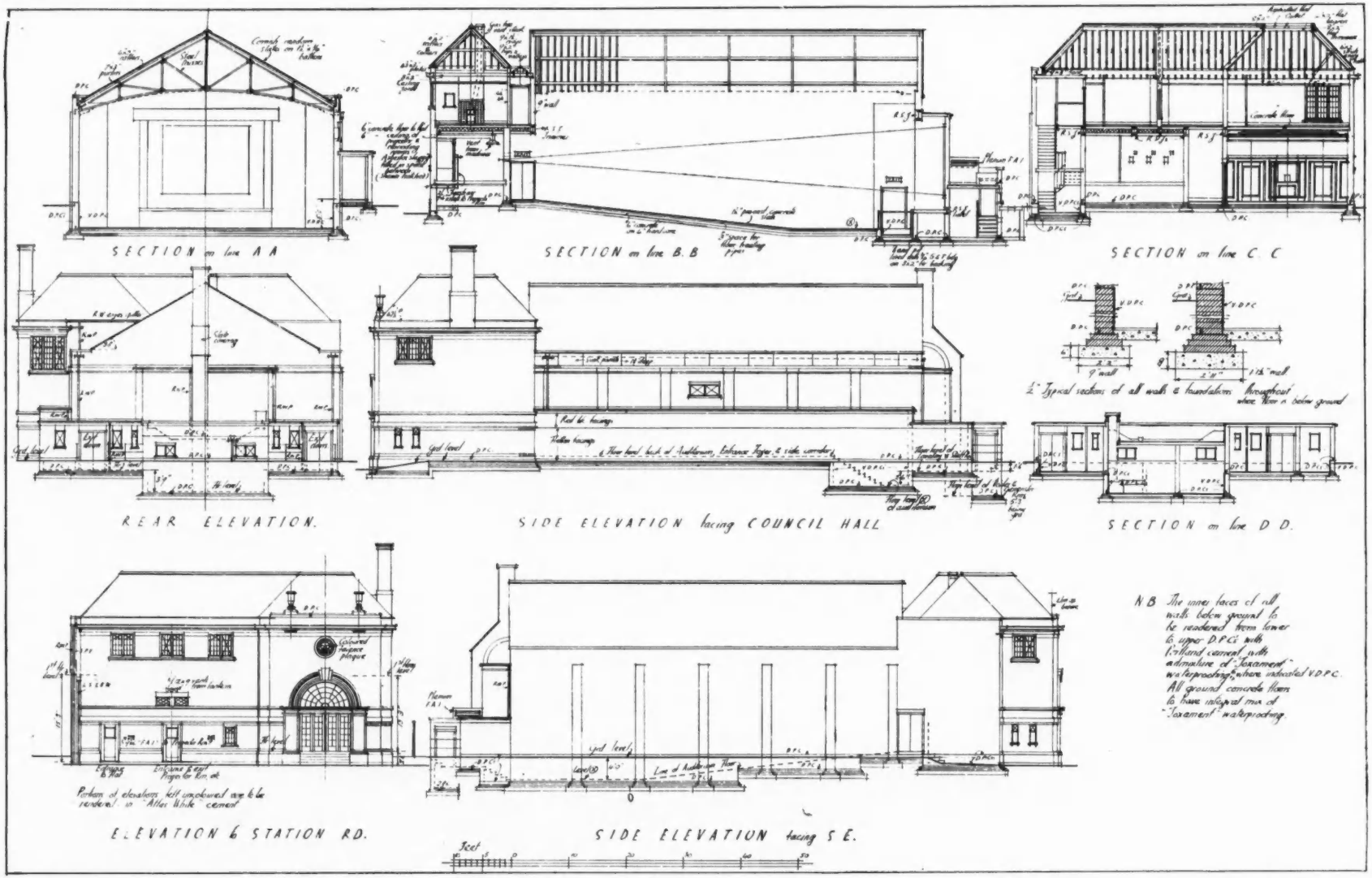


The proscenium and orchestra. The seating capacity of the single-floor auditorium is 500.



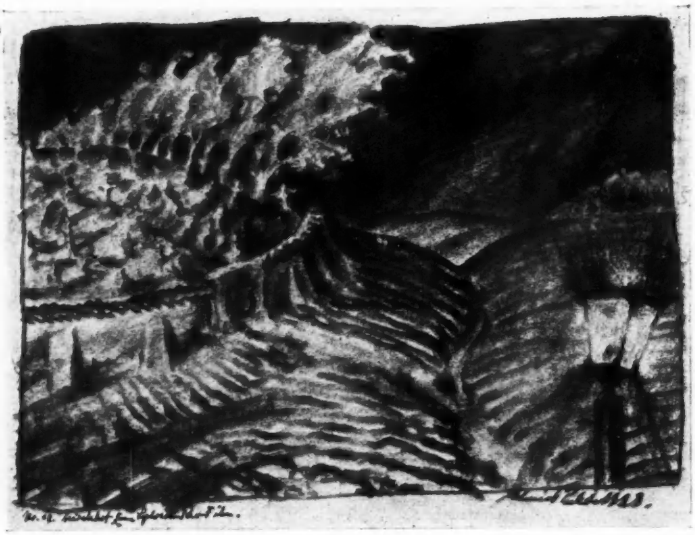
Cinema at Beaconsfield.] [*By Leathart and Granger.*

The architects' plan drawings of the foundations, the auditorium floor, and the residential flat above it. The floor of the hall is raked and the seating accommodation is intersected by two aisles, access to the higher priced seats, at the back, being direct from the foyer, and to the lower priced ones, in front, along a corridor. The auditorium is warmed by a floor system of heating, radiators being employed elsewhere. At the back of the screen, besides the heating chamber, is an engine-room for the generation of electricity. The residential flat has a lounge of good size, a dining-room, two bedrooms, kitchen, etc. Elevations and sections are given on the facing page.



Cinema at Beaconsfield.] [*By Leathart and Granger.*

In these drawings of the elevations and sections the arrangements adopted to meet the needs of single-floor working are clearly shown. The slight raising of the operating cabin, combined with the raking of the auditorium, give convenient and uninterrupted passage to the projection rays, as indicated by the sight lines. Ventilation of the hall is on the plenum system, with air inlets on either side of the proscenium opening and an extractor duct in the ceiling. The windows are metal casements, in wood frames; glazing is with leaded lights.



Original design by Klaus Richter for a scene in Lupu Pick's film production of "Sylvestre."

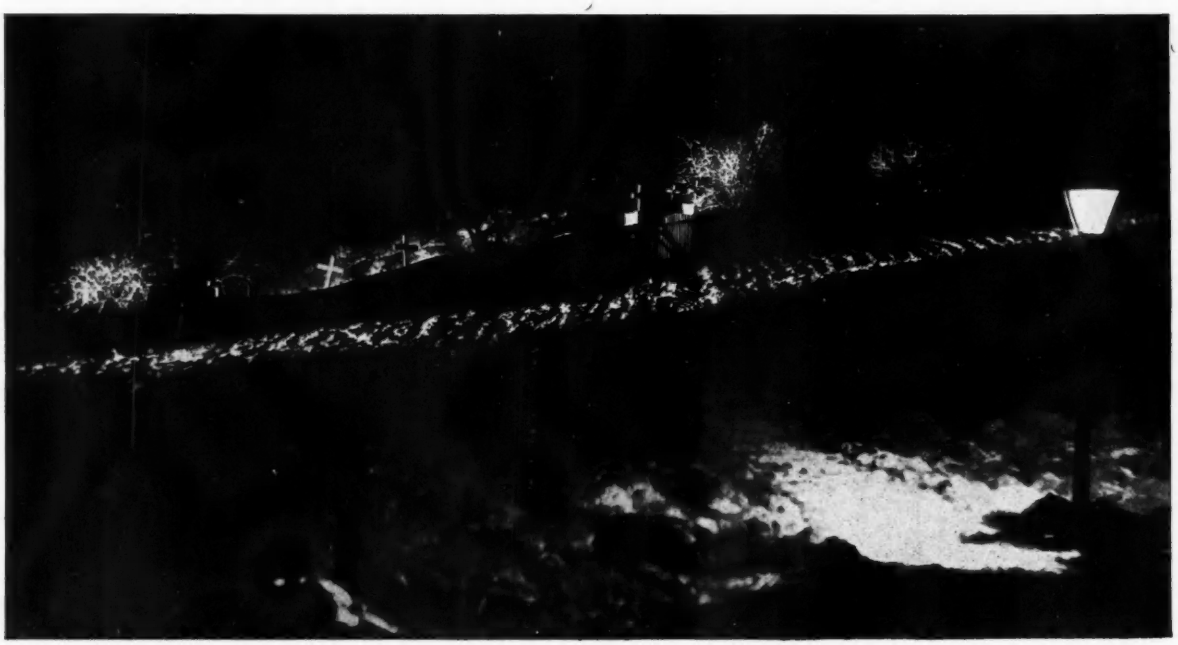
BUILDING SCENES FOR FILMS

An Opening for the Architect

BY EDWARD CARRICK

THE cinema is considered in the U.S.A. as a major industry, and business men of the rest of the world are beginning to wake up to this idea. Germany has realized that it provides, also, a great medium of expression for the artist, the architect, and the philosopher; and this is the attitude that we in England should adopt if we ever wish to achieve great results, with the reservation that, in our case, the philosophic factor should not bulk so largely.

Before anything artistic can happen here, apart from the acting, our architects and artists must really try and look on the films seriously. At present they are apt to consider them vulgar and degrading, very likely because they have not been lucky in what they have seen. After witnessing films such

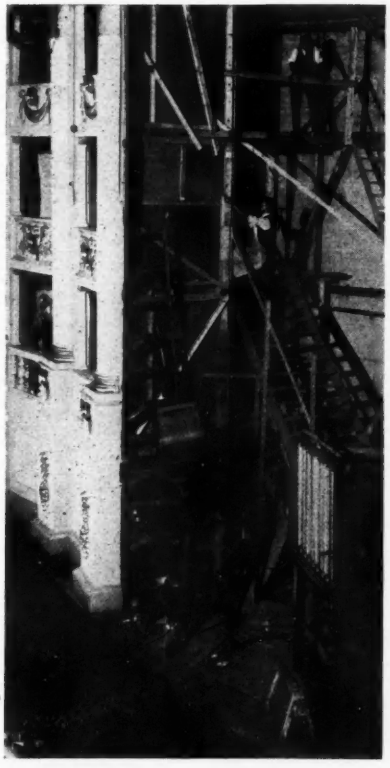


How the above design for "Silvestre" was actually carried out. The wall and gate were built of three-ply and plaster upon an unruly piece of ground belonging to the studio. Crosses and trees and lamp-post were planted, and the foreground ploughed.

as "The Student of Prague," "The Spy," or "White Shadows of the South Seas," one is forced to admit that these great media—form, movement, and sound (not dialogue)—are magnificent to work in; and the day after the artists of this country get a real say in the film industry we shall easily beat the rest of the world.

An art director in a film studio controls the following departments: carpentry and joinery, plasterwork and model-making, property-making, decorating, trickwork, and costume designing. His work is generally as follows: A scenario is selected by the producer and directors of the company, and then the producer and art director set to work. The producer wishes to express something in the production, and it is the art director's task to help him to achieve the desired result by designing him scenes or "sets," as they are called, in accordance with his sentiments.

The process of building is very easy; once the design or scale model has been decided upon, and plans have been made, the entire construction is carried out in three-ply boarding, planks and timber of every kind, plaster, paint, and paper. All the usual wood mouldings, and anything original he cares to design, can be made in the shops on the premises. In Germany the plaster shop is one of the departments most used, and it is quite a usual thing to make plaster casts of a complete panelled room, or to take casts of old beams for the interior of a half-timbered cottage, etc.



A typical cinema set showing the fragile construction. A view "behind" of the scene for "The Broken Melody," illustrated below.

When the "set" is finished it has to be furnished. In most countries, unless what is required can be found and hired from furniture dealers in the town, the art director designs his own, and it is made on the premises. In designing for historical plays, correctness of detail is essential, for in the films everything is liable to be taken suddenly in a close-up, and the eye of the camera is both single and sharp.

Talking of detail reminds me of a story of an American producer who one day came upon a set that had just been prepared. He looked round, and at once spotted something. "Send me the art director!" he cried. The art director arrived, and the producer took him by the shoulder and pointed to the centre of the set. "Say kid," he said, "do you think you know where this scene is located? This is supposed to be an English baronial hall; take away those goddam china spittoons and bring me gold ones."

In Germany the art director is also art adviser and makes suggestions as to music and action as well. I have seen Klaus Richter, the celebrated German artist, preparing hundreds of sketches for a production, and not only did he

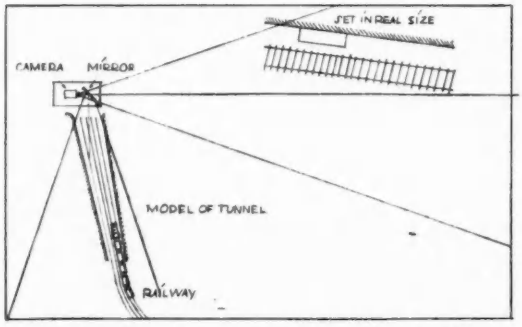


The stage and half the auditorium of a theatre scene built by E. Carrick for the Welsh-Pearson production of the film "The Broken Melody." Only three-ply wood and timbers were used.



The Schufftan process in use for a railway tunnel drama: a view in the studio showing, in the foreground, the small-scale model of the tunnel, and, in the background, the full-size fragment of the set before which the action passes.

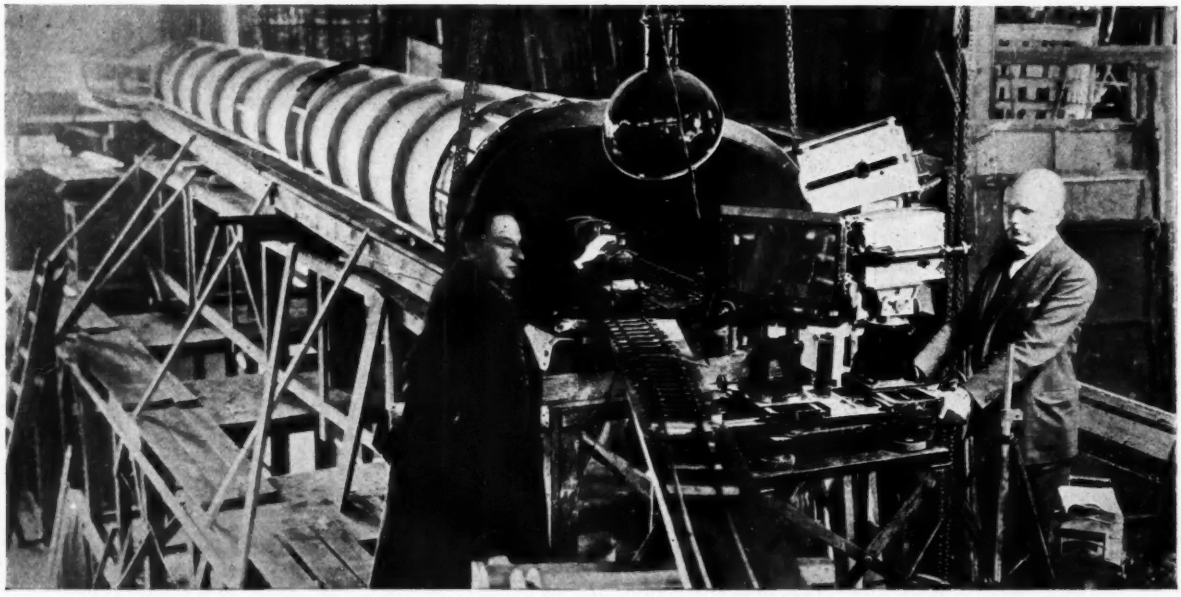
draw the scenes from every angle, but the attitudes of the characters at strategic points in the plot, and portraits of the characters as he imagined them. But, then, in Germany, producers, art directors, and the rest of the staff are all out to co-operate in making a fine production, and suggestions from all are welcome, especially from the artist, who is regarded as being a man to whom God has been kind enough to grant a special flow of ideas.



Plan of positions of camera, mirror, model, and actual set.

Unluckily, in this country, at present, one of the most noticeable things in a studio is the fact that all the heads of departments are enemies one of another. No one tries to help for the sake of an ideal for fear his work will not be credited to him personally. The personal consideration is always predominant, and all are divided against the producer.

To the Germans must be credited the invention of the Schufftan process. This is a



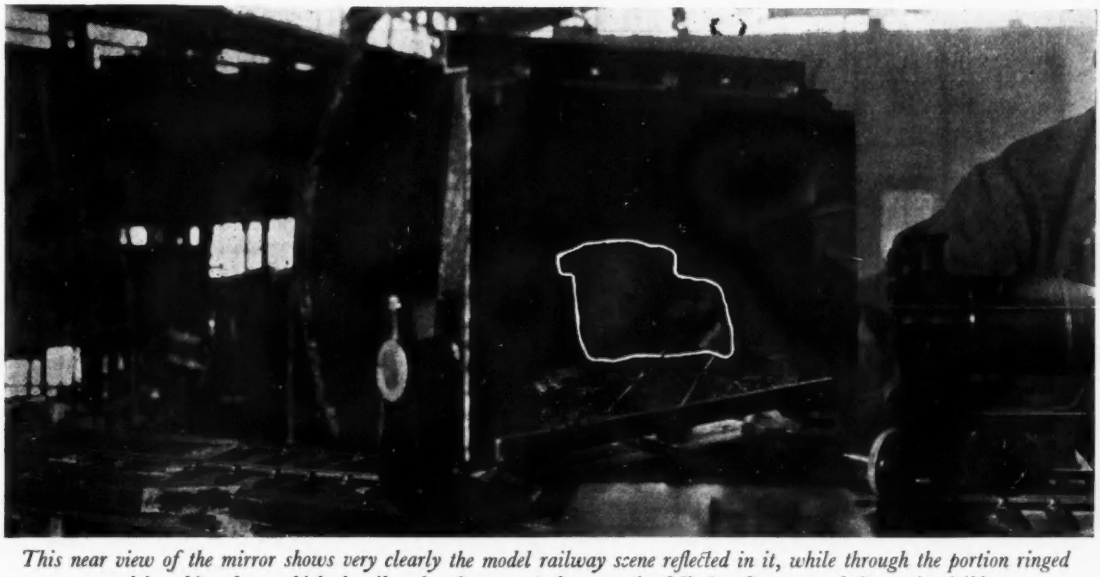
Another view in the studio, showing the mouth of the model tunnel, railway train and lines, the mirror, and the camera, the operator of which is looking through the irregular aperture in the mirror towards the full-size set.

simple but ingenious arrangement of a camera and a looking-glass which, when worked in conjunction with models, makes the wildest and most fantastic ideas of a Piranesi possible on the films. You can design buildings hundreds of feet high, and still have action take place upon them, and all at very small cost. This process is worth describing.

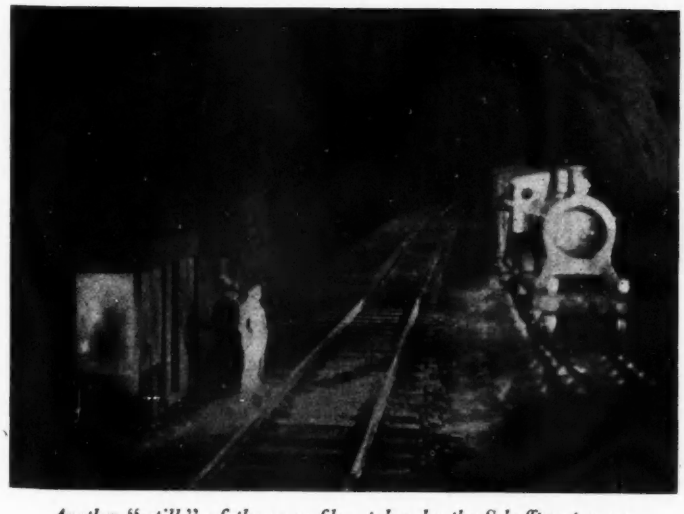
You build a very carefully detailed model of whatever your imagination has visualized; let us say, for example, a fantastic castle. You want a princess to appear at one of the windows and to wave to some knights as they pass beneath the gates. Well, you reflect your correctly-lighted model into a sheet of looking-glass at a certain angle in front of your camera, so that looking through the camera at the glass only the model is to be seen. Then you go behind your mirror and scratch away the silver from behind the window and gate at which you intend your characters to appear, so that, looking at your reflected castle, you have an image of it, perfect except for the two holes through which you can see into the spaces beyond.



A " still " from the film, prepared as illustrated on the facing page.



This near view of the mirror shows very clearly the model railway scene reflected in it, while through the portion ringed round in white, from which the silver has been scraped away, the full-size fragment of the set is visible.



Another " still " of the same film, taken by the Schufftan process.

Now you fill these spaces up in a very simple way. At a given distance behind the mirror, this distance being governed by the laws of perspective, you build your gateway, life-size; and upon a scaffold near by, you build your window. Behind the window you place your princess and beneath your gate the knights, light them to correspond with the model, and all is perfect. The action takes place and you have a picture which has cost a twentieth part of what you would have spent on building the front of a castle.

" But surely you see the join," everyone says. No, you don't, because the image of the model reflected in the mirror appears in focus, in common with the built-up fragments of life-size scene behind, whereas the jagged sawlike edge where the mirror has been chipped away, because it is so near the camera, becomes out of focus and vignettes itself away into the reality which is built at the correct perspective distance. This is an extraordinarily interesting process that should bring architects with imagination seriously into the films.

HOT WATER DIRECT FROM THE FLAME

A Revolutionary Principle Applied to Central Heating

For many years it has been the dream of engineers to burn fuel in direct contact with water for heating purposes. This has now become practicable and the results are likely to be far-reaching. As being of very direct interest to architects, the subject is now introduced to their notice for the first time. The following article, by an expert, explains the general principle.

Architects who are called upon to advise clients in respect to systems of central heating naturally have to consider such matters as the space available for heating plant and fuel storage, the class of fuel available, and the efficiency which the system of combustion will give. There are, of course, conditions under which the coal- or coke-fired boiler may be considered desirable. Today, in general, however, the central-heating installation must be considered with a view to maximum fuel economy as well as minimum requirements in respect of space and fuel storage.

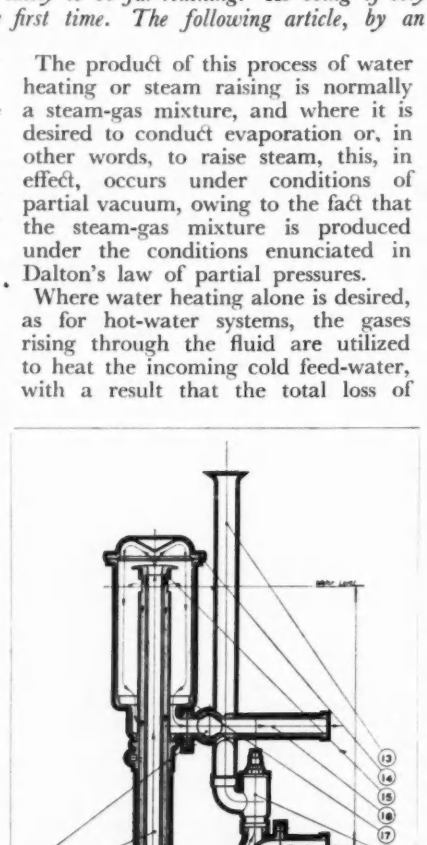
Particularly under town conditions, or for any installation within the supply radius of a gas company, town's gas offers many advantages on account of cleanliness, elimination of storage requirements, and general facility in application. At the present price of gas, however, it becomes very essential to ensure the highest possible efficiency in both the combustion process and the transfer of the generated heat to useful work. Whenever external heating is applied to water for heating circuits, a considerable amount of the heat is inevitably lost in flue gases or dissipated without transfer to the system.

What is termed submerged combustion offers revolutionary advantages in this respect where either gas or oil are available. The idea of burning a flame in direct contact with a liquid is not new, and has, indeed, witnessed many phases of experiment and failure during the past forty years. From existence merely in the minds of visionaries it has now emerged as a practical proposition. With the development of the Hammond system, which is based on a proper understanding of the essential requirements, the experimental stage is definitely past and the potential economies have become actual; it is time to indicate their extent.

The elimination of any intermediate medium, such as the walls of a boiler or container, removes one of the greatest sources of loss of efficiency. Instead, the products of combustion, splitting up into gas bubbles, the mean size of which is somewhere round one-thousandth of an inch cube, give an immense area of contact with the water, permitting practically instantaneous heat transfer, while at the same time reducing radiation losses, with a suitably insulated container, to a negligible quantity.

The product of this process of water heating or steam raising is normally a steam-gas mixture, and where it is desired to conduct evaporation or, in other words, to raise steam, this, in effect, occurs under conditions of partial vacuum, owing to the fact that the steam-gas mixture is produced under the conditions enunciated in Dalton's law of partial pressures.

Where water heating alone is desired, as for hot-water systems, the gases rising through the fluid are utilized to heat the incoming cold feed-water, with a result that the total loss of heat is brought in most cases as low as 5 per cent. of the total available in the fuel.



Diagrammatic section through combustion and circulating units; for explanation see text.

Sight must not be lost of a cardinal factor in the system. It is unique in that it retains the latent heat which in any other process of combustion is dissipated. It is well known that when any fuel containing hydrogen is burned, water of combustion, as it is termed, is created. In the ordinary boiler this, of necessity, passes off as vapour with the flue gases, and its latent heat is lost. With submerged combustion this source of loss is eliminated. This is a point of sufficient importance to demand discussion in some detail, but first it will be desirable to give some idea of the form of the apparatus.

There are many variations in the application of the combustion and circulating units in central heating. As regards circulation, advantage is taken of the aeration of the water engendered by the gaseous products of combustion to create a positive circulation in the system. This is done by the simple process of surrounding the burner of the combustion unit with a chamber having an inlet for the colder, heavier water, and an outlet for the rising aerated water. This chamber may be merely an open-ended cylinder of larger diameter than the burner and surrounding the flame zone. By this simple means is produced the air-lift effect which is well known as a means of deep-well pumping, where compressed air is the medium for aerating the ascending column. In the case of submerged combustion the additional heat effect still further intensifies the circulation.

The principle of the plant is depicted diagrammatically in the figure. In this practical application for central heating (8) is the burner, (10) the circulator chamber or air-lift foot-piece, (27) is an expansion tank in which the water-level is shown, (2) is the rising main surmounted by a head tank (17), which tank is maintained full of hot water by the action of the burner in heating and aerating the column of water in the rising main (2). The hot water flows from this tank by gravity by the outlet (16) and by the superior head thus provided displaces the cold water through the radiator system. A deflector cover is provided in the head tank and the aerated column of hot water impinges on this cover, effectually separating the steam and

gases from the water. This steam-gas mixture then descends by way of an annular passage (15) surrounding the rising main and leaves the system by way of a heat exchange in counter-flow with the return cold water from the radiator system entering at (19). The lowest possible temperature of the gases is thus obtained at the outlet (13).

Returning, now, to the consideration of the latent heat problem, engineers, of course, are familiar with the method of determining the calorific value of a fuel by burning a sample of it, of known weight, in a calorimeter in which the products of combustion are cooled by passing them through water. The weight of the water and its increase in temperature being measured, the total amount of heat given out by the combustion of the sample can thus be determined. This test, however, does not strictly correspond to the heating value of a fuel under ordinary industrial conditions where, as previously mentioned, the latent heat of the steam formed by combustion is commonly lost.

Hence the practice has grown up of considering a fuel's value on the net calorific basis, i.e., its total heat-producing capacity, *less that dissipated by water formation in the combustion process*. The total heat value, while theoretically available, cannot be applied in practice. This is important when dealing with such fuels as town gas, which may have an appreciable hydrogen content and hence form considerable water of combustion.

The disability above mentioned is not involved in the process of submerged combustion, as much of the water vapour formed by combustion of the hydrogen and oxygen is condensed and the heat added to the system. The subject will be better appreciated by examining an actual case in which the temperature of water to the radiators was 137 deg. F., and the temperature of the return water was 128 deg. F. Temperature of the exhaust products of combustion was 120 deg. F., and the gas had a gross heat value of 501·5 B.T.U., the net value being 448·1 B.T.U.

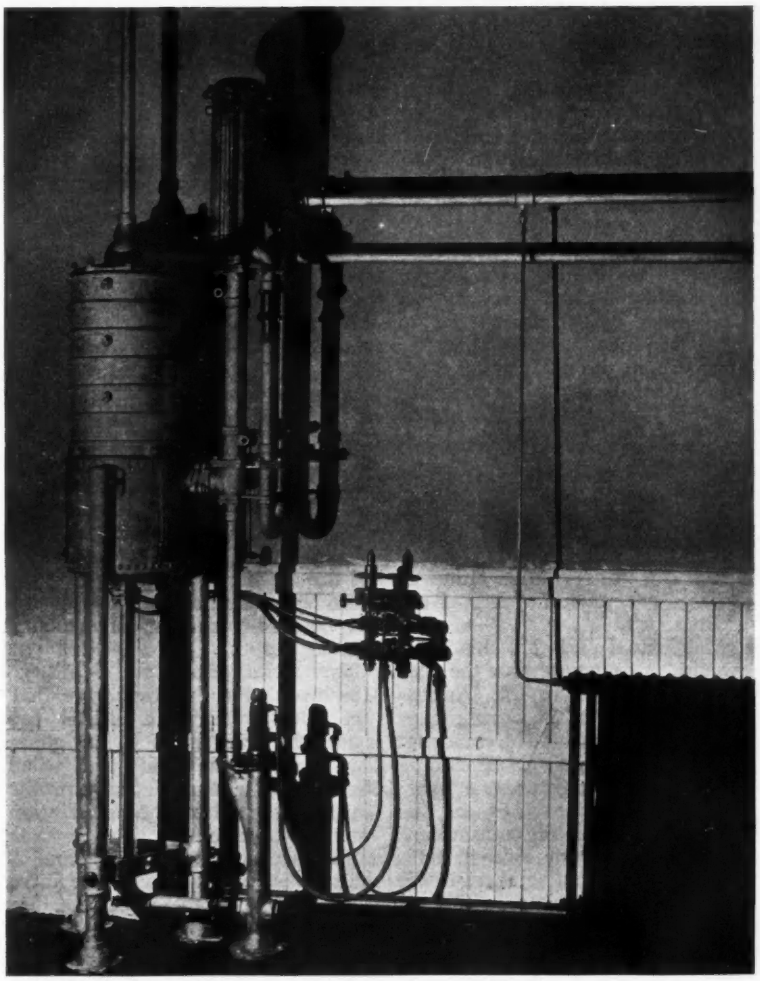
The whole of the difference, 53·4 B.T.U., or 10·6 per cent. of the gross value of the gas in this case, would be lost as latent heat of the water vapour from combustion on all normal systems under working conditions. In the Hammond system, with the exhaust gases at their normal temperature of 120 deg. F., saturated with water vapour, the loss by latent heat of water vapour uncondensed was only 22·1 B.T.U. or 4·4 per cent. of the heat value of the gas. The useful heat recovery was 474·4 B.T.U., or 94·6 per cent. of gross value, and was actually 105·8 per cent. of the net or lower calorific value on which results are often calculated.

The intimate contact of the products of combustion with the water to be heated is accompanied by an extremely low exhaust gas temperature. In a central-heating unit this is from 5 deg. to 8 deg. F. below the temperature of the return water from the radiators. With condensation of the water vapour in the products of combustion, and the recovery of its latent heat, more than 100 per cent. of the net heating value of the fuel is recovered under normal conditions of central heating.

This demonstrates clearly that, however convenient the net calorific value may be for some purposes, it is really a false basis. This should be kept clearly in mind when comparisons are made, since the net heat value is frequently used in estimating efficiencies of central-heating systems; and the actual efficiencies obtained by submerged combustion, when expressed on such an artificial basis, might therefore seem ridiculous.

The over-all efficiency of the heat transfer of this system will, of course, depend upon the temperature of the return water. If the water returns from the radiator installation at atmospheric temperature the system will be practically 100 per cent. efficient and correspondingly less with higher temperatures of return. At 40 deg. C. (104 deg. F.) the loss is only 2·91 per cent., and even at 60 deg. C. (140 deg. F.) does not exceed 10·1 per cent. Remarkable though these figures appear, they are accounted for by the fact that the combustion unit, by giving a perfectly controlled mixture of fuel and air, the proportions of which are maintained under any variation of rate of operation, and ensuring perfect combustion, permits no loss of heat value other than that which occurs in the final exit gases.

Since the whole apparatus is designed for automatic thermostatic control and can be operated on gas or oil fuel, it will be seen that it is particularly adapted to central-heating.



A Hammond installation, gas-fired, in use for central heating. The arrangement is essentially the same as that shown (reversed) on the facing page.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

Further information as to Charing Cross Bridge was given in the House of Commons last week.

Mr. Morrison, the Minister of Transport, in reply to Mr. Albery, said that as the outcome of a meeting between the chairman of the Improvements Committee of the London County Council, representatives of the Southern Railway Company, and himself, provisional heads of agreement for the construction of a new Charing Cross Bridge and for the removal of Charing Cross Station to the south side of the river had been settled between the representatives of the Council and the railway company, with his concurrence. The provisional agreement was subject to the approval of the London County Council and of the shareholders of the railway company. Meetings to arrive at a final decision had been convened both by the Council and by the Company. He appreciated the efforts of his predecessor in office and of all the parties to this prolonged negotiation to bring about a satisfactory settlement of so great a scheme of improvement.

In reply to another question as to the proposed site of the new Charing Cross Station on the Surrey side of the Thames, Mr. Morrison said that the site was approximately a triangular one bounded on the one side by the proposed new elevated roadway on the river front, on the second side by Waterloo Road, and on the third by the approach to the new bridge.

In the House of Lords the Housing (Revision of Contributions) Bill passed all its stages and later received the Royal Assent.

At question time in the House of Commons, Mr. Lathan asked the Prime Minister if he could hold out any hope that time would be found this year for the consideration of legislation to amend the Rent Restrictions Act.

Mr. MacDonald said that this question would, of course, receive the very careful consideration of the Government, but in view of the other urgent items of their programme he could not hold out any prospect of amending legislation during the present year; but it would be proposed in the autumn to provide for the continuance of the Rent Restriction Acts in their present form by including them in the Expiring Laws Continuance Bill.

Major Church asked the First Commissioner of Works whether he would consider the desirability of introducing legislation having for its object the protection of our national historical buildings at present under ecclesiastical control, for example, Westminster Abbey, from acts calculated to destroy their historical significance.

Mr. Lansbury said that as at present advised he was not prepared to promote legislation with this object.

Sir Walter de Frece asked the Home Secretary whether he would consider the desirability of recommending to the different county councils a pattern type or types of petrol station to be erected in their respective areas with the object of avoiding the disfiguration of the landscape which was still in progress.

Mr. Short said that a suggestion to this effect was considered by the Departmental Committee on Petroleum Filling Stations which reported in May, but the committee came to the conclusion that it was impracticable having regard to the manifold varieties in the location and surroundings of such stations.

Mr. Greenwood informed Mr. Day hat up to July 1, 1929, the total number of houses that had been erected since the armistice by local authorities in England and Wales under the various schemes of State assistance was 481,724.

Lady Cynthia Mosley asked the Minister of Health whether he had considered the advisability of providing the local authorities with powers and facilities for the purchase of existing housing accommodation in order to assist them in the better allocation of such accommodation, and to meet the requirements of working-class families unable to pay the rent of new council houses and at present living in overcrowded conditions.

Mr. Greenwood, the Minister of Health, replied that local authorities already had powers under section 5 of the Housing Act, 1925, to provide housing accommodation for the working classes by acquiring houses suitable for the purpose.

Mr. Ayles asked the Minister of Health whether he was aware that in the Bridgwater and Bristol brickyards the price of bricks had gone up by 11s. per thousand; and whether he would take steps to prevent profiteering as the result of the acceleration of housing schemes.

Mr. Greenwood: I understand that there has recently been some increase in brick prices in these localities, though not to the extent suggested. I have asked the Inter-departmental Committee on the Prices of Building Materials to investigate the matter.

Mr. Ayles asked if the Minister was aware that in Bristol and in the West of England promoters of housing schemes could not build houses to any extent owing to shortage of bricks; that public housing schemes are only allowed to have a limited supply of bricks after private builders have had what they require; and whether he would take steps to see that the utmost facilities were provided for municipalities to obtain materials.

Mr. Greenwood: I understand that there has been some shortage in the supply of bricks, owing to the exceptionally large orders which have been placed recently so that houses might be completed by September 30 next. I am informed, however, that it is not a fact that private builders are given preference over housing schemes. I anticipate that the position will improve as a result of the decision to continue the present rate of subsidy under the Act of 1924, and I am, in fact, informed that already the position has become easier.

Mr. Simon asked the Minister of Health if he was aware that many builders who were building houses under the Housing Act, 1923, were likely to be prevented by circumstances beyond their own control from finishing their contracts by September 30, and would therefore suffer hardship by losing the subsidy; and whether he was prepared to give a reasonable extension of time in such cases.

Mr. Greenwood: I have no power to grant an extension of time for the payment of subsidies under the Housing Act, 1923, even in such circumstances as are referred to by the hon. member.

Mr. William Taylor asked the Minister of Health if he would state what steps, if any, were being taken to bring backward local authorities up to a reasonable standard in providing houses for rural workers in their areas.

Mr. Greenwood: The need for the adequate discharge of their duties under the Housing Acts is impressed upon any local authority if I have any good reason to think that they do not recognize it.

Sir Albert Bennett asked the Minister of Health what was the policy of his department on the subject of the subletting of council houses.

Mr. Greenwood: The general management of houses provided by local authorities is by statute entirely a matter for the local authorities, and the question of sub-letting is a matter for their discretion. The Housing (Financial Provisions) Act, 1924, requires it to be a term of the letting of any house on which subsidy is paid under that Act that the tenant should not sub-let except with the consent of the local authority.

Mr. Matters asked the Minister of Agriculture if he was aware that,

fronting the Stockwell tube station, Clapham Road, S.W.9, there was an area of some acreage, formerly occupied by railway workshops, and now considered locally as suitable for a housing site; and would he state, with regard to this land, which was Crown property, what leases or commitments attached to it, and whether it could be made available for the erection of dwellings suitable for working-class tenants.

Mr. Buxton (Minister of Agriculture): The area in question was acquired by the Commissioners of Crown Lands, by arrangement with the Ministry of Transport, with a view to its utilization as a site for dwellings for working-class tenants displaced on account of demolitions in connection with the new Charing Cross Bridge. Meantime, it has been let on short tenancy.

Captain Cazalet asked the Prime Minister whether his attention had been called to the sale of the Bradenstoke tithe barn in Wiltshire and its removal to the United States of America; and whether he contemplated any legislation which would give the Commissioner of Works under the Ancient Monuments Consolidation and Amendment Act, 1913, additional powers so as to ensure that similar removals of buildings could not take place in the future.

Mr. MacDonald said he had learned with much regret that this building had been demolished, but he understood that it was not the fact that it was being removed to America. He understood that it had been for a long time in a state of decay and that the purchasers had pulled it down to re-use some of the old materials at another ancient building in Wales. He would ask the First Commissioner of Works to consider whether any additional legislative powers were needed to safeguard such old buildings.

Mr. Greenwood informed Mr. Wellock that the number of local authorities in England and Wales who were building houses by direct labour at July 1, 1929, was forty eight, and at July 1, 1928, fifty.

OBITUARY

HARRY BESWICK: 1856-1929

We regret to record the death of Mr. Harry Beswick, F.R.I.B.A., of Chester.

Educated at the King's School, Chester, he was responsible for a great deal of work for the Cheshire County Council, and was appointed county architect in 1896. He retired from this position in 1926 and carried on his architectural practice in partnership with his son. Mr. Beswick was seventy-three years old.

LAW REPORTS

BUILDING CONDITIONS: QUESTION OF RESTRICTIONS. DECISION

Re *Liddell's Trusts and* re *the Law of Property Act. Chancery Division. Before Mr. Justice Romer*

This matter came before the Court for its decision whether certain land at Elswick, Newcastle-on-Tyne, was or was not affected by restrictions in building conditions imposed in 1865 upon purchasers of sites which then formed part of the estate.

Mr. Gavin Simonds, K.C., for the applicants, the trustees of the Grainger estate, said the question for the decision of the Court was whether, if any restrictions existed, what they were and whether they were enforceable, and if so, by whom. The respondents were a large body of adjoining owners, whose interest it was to contend that there were building restrictions on the estate. Proceeding, counsel said that under the building conditions of 1865 purchasers could build one substantial dwelling-house, or two semi-detached, on each plot, and no more. The applicants, who were the trustees, now desired to erect on the portion of the estate involved, factories, blocks of flats, tenement houses, and churches, and his submission to the Court was that the conditions did not apply to the retained portion of the estate, and that if they did, there had been such a change in the character of the neighbourhood that it would be inequitable to enforce them and hold up the development of a large area. He submitted that all the elements of a building scheme were missing from the contracts of 1865, as the covenants were only of an affirmative character, and there were no restrictions as to user or maintenance.

Counsel read affidavits on behalf of the trustees to show that there had been a great change in the neighbourhood since 1909, owing largely to the development of Messrs. Armstrong's works.

Mr. Vaisey, K.C., for the respondents, said that it was only after the evidence as to the nature of the 1865 contracts had been largely lost that they took advantage of the Law of Property Act to come to the Court and ask it to decide that there were no restrictions. The inference he asked the Court to draw from this was that it was strongly significant of there being binding covenants, and inconsistent with the trustees having a free hand. In his submission it was contemplated in 1865 to sell the whole of the estate out and out, and that there was a common general scheme applying to the entire area.

Counsel read affidavits made by his clients to show that there had been no material change in the character of the immediate area, and that at the moment good high-class residences were in course of erection.

His lordship, in his judgment, reviewed the facts of the case and said that in his opinion if the vendor had desired to preserve the estate for purely residential purposes, he would have expressly stipulated to the effect. The purchasers having erected one substantial dwelling-house, or two semi-detached, he could see nothing in the conditions which prevented them converting the premises into shops or offices. Looking at the stipulations as a whole, and the only restriction was the words "and no more," he was unable to regard them as an intention to preserve the land as a residential estate. If it were so, the land was obviously free from restriction, and if the land sold was still subject to some restriction, he was unable to see how the purchaser could enforce such restriction against the land unsold. Giving the matter his best consideration, he came to the conclusion that there was no general building scheme, and that as between the applicants and the respondents he held that the applicants' land was not subject to any restriction. He ordered the applicants to pay the respondents' costs.

DISPUTED HIGHWAY: INTENTION OF ESTATE TRUSTEES

Attorney General v. *Whitehead. Chancery Division. Before Mr. Justice Luxmoore*

This matter referred to a dispute as to the highway. The Attorney General, acting at the instance of the Hawarden Rural District Council, sought an injunction against Mr. S. P. Whitehead, of the Bungalow, Wood Lane, Hawarden, to restrain him from erecting a fence or hedge on the public highway from Buckley to Hawarden. They also sought a declaration that the highway was 30 ft. wide, and that the fence and hedge erected by the defendant should be removed.

Defendant denied that the highway was 30 ft. wide, and declared that he had erected his fence on the grass verge, which was part of his property and did not belong to the highway.

Sir Thomas Hughes, K.C., for the plaintiffs, said the public had rights over the grass verge to a highway as well as over the installed part of a highway. The grass verge was used for various purposes—sometimes for people to walk upon, to put road metal on and road sweepings, and sometimes for a motor-car to run on when unavoidable. The land for this public highway was given by the Gladstone trustees, and the intention was that it

should be a 30 ft. highway. The trustees made the road before handing it over to the Hawarden and Buckley Councils.

Mr. S. Gardner, formerly estate agent to the Gladstone trustees at Hawarden, stated that the intention of the trustees was that there should be a 30 ft. public road.

Mr. Montgomery, K.C., for the defendant, agreed that it was clear that the Hawarden Council and the Buckley Council believed that they had secured a 30 ft. road for the public and under those circumstances Mr. Whitehead would not further oppose a declaration that there was a 30 ft. highway if the roadway line could be agreed.

His lordship granted the declaration asked for, but the drafting of it was adjourned to enable the line of the road to be defined. Where existing boundaries gave a minimum width of 28 ft. 10 in., they would not be disturbed.

PUBLIC HEALTH ACT, 1925: WIDE POWERS

Attorney General v. *Sunderland Corporation. Chancery Division. Before Mr. Justice Eve*

In this case the Attorney-General, at the relation of Mr. C. T. Stockdale and Mr. Thomas Rutherford, of Sunderland, sought a declaration that the Corporation were not entitled to provide a parking place for motor-cars on a piece of land known as The Shrubbery bounded by East and West Sunniside and Norfolk Street, Sunderland, and an injunction in the same terms. The land in question was about 5,918 sq. yds. in area, and before its purchase by the Corporation in 1896 was in a derelict condition. By a covenant to surrender dated December 30, 1896, it was vested in trustees for the Corporation to be conveyed to the Corporation for the purposes authorized by the Public Health Acts and section 7 of the Post Office Act, 1891. It was purchased for four different objects: 1: to provide a site for a new post office; 2: for the widening of adjoining streets; 3: for the formation of new streets across the land; and 4: to provide public walks or pleasure gardens. A plan was submitted to the Local Government Board showing how it was proposed to use the land, and the Board approved the purchase. The post office was built and the roads widened, and the rest of the land was kept by the Corporation as an ornamental garden surrounded by railings, but not dedicated or open to public use. In August 1927, the Corporation resolved to use The Shrubbery or part of it as a parking place for motor-cars in pursuance of their powers under section 68 of the Public Health Act, 1925. A petition signed by about ninety persons, owners or occupiers of premises adjoining, was presented to the Corporation protesting against the decision, but it was confirmed, and the relators then brought this action.

By section 68 of the Public Health Act, 1925, a local authority might provide a parking place; and for that purpose might acquire land, or utilize any lands which might lawfully be appropriated to that purpose, or authorize the use of any part of a street within their district (not within the London traffic area).

His lordship held that the action failed and dismissed it, with costs. He said that since the land had been purchased times had changed. New forms of locomotion had come into being, and the time had come when more land was wanted for the street and less for the pleasure ground. Was the land wanted for the purpose for which it was acquired? Here the land was acquired partly for street widening and partly only, not solely, for the purpose of a pleasure ground. It was impossible for him to hold that because new circumstances had arisen the action of the Corporation in determining to avail themselves of the present opportunity to use the land to widen the street for the purpose of a motor-car parking place was *ultra vires*, though no doubt some of the people who lived in the neighbourhood might be disappointed. The land could lawfully be used for the purpose of a widened street, and any part of a widened street could now, under subsection (*c*) of section 68 of the Public Health Act, 1925, be used for parking motor-cars. There were, however, various safeguards interposed by the Act between the proposal of the Corporation and its ultimate fulfilment.

ARCHITECTURE AND SANITARY SCIENCE

Sir Banister Fletcher, P.R.I.B.A., president of the architecture and engineering section of the Royal Sanitary Institute Congress at Sheffield, gave a short introductory address on "Architecture in its Relation to Sanitary Science." With regard to the planning of buildings, he said: we had not travelled so very far from the days when there was little or no ventilation of drains, when drain-pipes were jointed with soft clay into which roots of plants could penetrate and choke the drain; or from the time when water-closets were lighted and ventilated only from the main staircase of the house! We were escaping slowly from all these deadly perils, but we must have a care that others more insidious did not creep in through the effort to meet modern requirements while avoiding undue expenditure. Certain anomalies which often existed in the construction of houses would, he hoped, disappear, such as the hidden spaces left in many houses which were conducive to the secretion of filth, and the breeding of vermin, and which thus promoted disease. He referred in particular to the time-honoured method of constructing the ordinary timber floor. Other sanitary improvements were inadequate while such a hidden harbour for dirt still existed in the generality of houses; for washing such a floor only made matters worse, as much of the liquid dirt oozed down below the floor-boards and accumulated on the laths of the plaster ceiling below. Floors must be solid if we would have them sanitary, or if the usual method was persisted in, he suggested that the plaster ceiling be omitted, thus exposing the joists to view and to the air. Two layers of floor-boards with felt between could be provided for deadening the sound.

Floors of steel joists and concrete were much to be preferred to the old timber floor, especially when covered with mosaic or some non-absorbent material and joined by a rounded angle to a cement skirting. If this method was too expensive the wooden joists should either be exposed on their underside, as already stated, or filled in with concrete resting on side fillets, which made a good solid floor construction. There could be no doubt that the latter method would be greatly extended in the future, even for ordinary dwelling-houses, and would in itself produce better sanitar conditions in the actual construction.

Even today, he said, in most up-to-date blocks of flats a window was still not compulsory in a bathroom. On the Continent, however, sanitation lagged far behind that which obtained in England, and in some of the best foreign hotels you would find w.c.s reached only through bedrooms or internal passages, with no window ventilation, but only a grating into a flue. In theatres, music-halls, cinemas, assembly-halls, and churches there was great need for improvement in the proper provision of pure air. Our Building Acts and Public Health Acts regulated construction and provided for a definite amount of cubic feet per person, but as regards the actual ventilation of public meeting-halls, the Acts were practically inoperative, and the state of the atmosphere in these buildings left much to be desired.

When London and other cities like Sheffield, he said, by legislative action shall have become smokeless cities, it would allow of the use of impervious flat roofs as playgrounds, flower-gardens, tennis-courts, and for sports generally.

HOUSING AND TOWN PLANNING

The Minister of Health, the Right Hon. Arthur Greenwood, M.P., received a deputation from the National Housing and Town Planning Council. Mr. F. M. Elgood, Mr. W. H. Gaunt, Sir William Cundiff, Councillor George Smith, and Mr. John G. Martin, secretary to the Council, put before him the following points:

1: That the Government should adopt a definite national programme for the building of 1,500,000 working-class dwellings with State assistance during the next ten years.

2: That all housing authorities should now be required to undertake a comprehensive and detailed housing survey of their respective areas.

3: That housing standards should be fully maintained and, in particular, that no three-bedroomed house built with State assistance should have a combined floor area of less than 760 sq. ft.

4: That the subsidy under the Housing Act of 1924 should be stabilized for a reasonable period of time, and that additional financial assistance should be provided to enable poor families with many dependants to occupy healthy dwellings.

5: That the Exchequer grant in aid of slum clearance schemes should be increased from one-half to at least two-thirds of the estimated annual loss on the schemes.

6: That the Town Planning Act should be extended so that it may apply to all land whether built upon or not, and that the existing powers for zoning should be extended.

The Minister, in reply, said that his frame of mind on housing generally was the same as in 1924. On the particular points put to him by the deputation he said that the 1924 Act recognized that there might be legitimate reasons for revision of the subsidy from time to time. He himself felt that it was impossible to commit Parliament for ten years, and any attempt to do so could be reversed by subsequent legislation. He could, however, say that he hoped to continue whatever subsidy was reasonable in the circumstances from time to time, and meanwhile had taken steps to preserve the Wheatley subsidy at its present figure until the next statutory review was due. This figure included the special provision made in the 1924 Act for rural areas.

He doubted whether a general survey was desirable, but he thought that local authorities did keep a grip on the needs of their areas, and that they could be relied upon to keep abreast of changes in local circumstances. He agreed that accurate knowledge was necessary, but it ought not to be obtained in such a way as to divert the attention of local authorities from the actual provision of houses. He trusted that it would be possible in the next census to obtain better statistics than hitherto in regard to housing.

He agreed that housing standards ought to be fully maintained, but he felt that in many areas there might be a real need for houses smaller than the three-bedroomed type for old couples and small families. While the main need was for three-bedroomed houses he thought that local authorities should not be debarred from providing smaller houses and that they could be trusted not to provide them in excessive numbers.

The slum was not a problem separate from the provision of new houses. The Government were committed in the King's Speech to slum legislation, which he hoped to be able to produce at an early date. Slums could not be dealt with merely as a problem of finance, important as that was, and he trusted in his legislation to be able to ease the local authorities' task by making the procedure more simple. He agreed that the slum problem was bound up with a number of town-planning considerations. While he must avoid overloading any Bill he might introduce he would, at the same time, recognize the town-planning considerations that arose.

R.I.B.A. COUNCIL MEETING

Following are notes from the minutes of the last meeting of the R.I.B.A.:

It was unanimously decided that the selection of an architect for the new R.I.B.A. premises in Portland Place should be determined by means of a competition open to all members of the R.I.B.A.

The hon. secretary spoke of the great services which Mr. Walter Tapper had rendered to the art of architecture and in the Institute during his tenure of the office of President, and on the hon. secretary's proposition a very hearty vote of thanks was passed in favour of the President and the other retiring members of Council.

The following societies were formally admitted as allied societies under bylaw 81: (*a*) The Suffolk Association of Architects; (*b*) The East Anglian Society of Architects, which has been formed by the alliance of the Norfolk and Norwich Association of Architects and the Suffolk Association of Architects.

On the recommendation of the Practice Standing Committee the following new clause has been added to the Code of Professional Practice: "An architect, on receiving instructions to proceed with certain work which was previously entrusted to another architect, shall, before proceeding with such work, communicate with the architect previously employed and inquire and ensure the fact that his engagement has been properly terminated."

The following have been appointed to serve on the committee which the Council have set up to consider and report upon the matter of the architectural design of aerodromes: Sir Sefton Brancker, K.C.B.; Messrs. C. Cowles-Voysey, E. Vincent Harris, O.B.E., Sir Edwin Lutyens, R.A., T. S. Tait, Maurice E. Webb, G. E. Woods-Humphrey, Major R. Mayo.

The Council have appointed the following as additional members of the British section of the C.P.I.A.: Messrs. Arthur J. Davis, Louis de Soissons, Dr. Raymond Unwin.

The Council, by a unanimous vote, elected the following architects to the Fellowship under the powers defined in the Supplemental Charter of 1925: Messrs. Allen Foxley, M.A., F. A. Walters, F.S.A.

The following ex-member was reinstated: Mr. Ralph Simmonds (Licentiate).

The following resignations were accepted with regret: Messrs. William George Smithson, George Gush, Ernest Albert Mann, Edgar Sage.

The following probationers were elected as students of the R.I.B.A.:

Broadbent, Richard (Leeds College of Art).
Cox, Frank Russell (Birmingham School of Architecture).
Cruickshank, George Leslie (Robert Gordon's Colleges, Aberdeen).
Dickinson, Gilbert (Leeds College of Art).
Firth, Thomas Frederick (Leeds College of Art).
Harris, Leonard David (Architectural Association).
Innes, Douglas William (Robert Gordon's Colleges, Aberdeen).
Jackson, Geoffrey Hart (Architectural Association).
McIntosh, Charles Wilkie (Birmingham School of Architecture).
McLaren, Ian Hastings (Robert Gordon's Colleges, Aberdeen).
Morreau, Cecil Joseph (Cambridge University School of Architecture).
Morrison, Robert James (Robert Gordon's Colleges, Aberdeen).
Morter, Philip Sidney Pelham (University of Liverpool).
Nightingale, Douglas Eric (University of London).
Owen, Herbert (University of Liverpool).
Randall, Gerald Frayne (Architectural Association).
Rose, John Cruikshank (Architectural Association).
Ross, Robert (Glasgow School of Architecture).
Roth, Stanley Henry James (Architectural Association).
Smith, George Alexander Nuttall (Architectural Association).
Stephen, Norman (Robert Gordon's Colleges, Aberdeen).
Stephenson, Gordon (University of Liverpool).
Wilson, John Craven (ArchitecturalAssociation)

SHADOW PROJECTION

A Holiday Course for Architectural Students: ix

BY JOHN M. HOLMES

Consideration is here given to the shade and shadows of two familiar architectural forms, accompanied by an explanation of the methods to be adopted when the shadow of an edge falls on two different planes, and when a shadow falls on inclined planes.

Diagrams 18-19: Shadows on a Pediment; and on a Mansard Roof

Let us study the shade and shadows of two familiar forms which illustrate the methods adopted when, as in diagram 18, the shadow of an edge falls on two different planes, and when, as in diagram 19, the shadow falls on inclined planes.

SHADOWS ON A PEDIMENT

DIAGRAM 18

The principles involved in this problem are those illustrated more simply in diagram W (instalment iii).

The elevation of the ray of light AB in the section on the left shows that the edge of the form represented by point C will be a dividing line, and that this dividing line will be projected either on to the dentel surface marked D above the section or between the dentels on to the tympanum surface T.

By drawing horizontal lines from points C and B in the section to intersect a line at 45 deg. through C in the elevation, points CSD on the dentel surface and CST on the tympanum surface are produced. Lines may then be drawn through these intersections parallel to the slopes of the gable. Lines through point CSD will give the shadow edge on the dentels; and lines through point CST, the shadow edge on the tympanum T. The portions of the dentels receiving light may then be projected on to surface T. Thus the parallelogram EFGH produces shadow points FS, HS, and GS. The edge FH being vertical, its shadow will also be vertical.

The shadow of the dividing line NO in the lower part of the elevation and those of the lower dentels are projected horizontally from points where the elevation of the ray of light PQ touches the section. The shadows may thus be found (from the section) without reference to a plan. They may be also found by projection from the plan without using a section, viz. the shadow from point C in plan is projected through the dentel face to give CSD, and through the tympanum face to give CST. Other points such as G and H, are projected as usual. It should be noted that JG in plan has for its shadow the diagonal JS—GS in elevation.

SHADOWS ON A MANSARD ROOF

DIAGRAM 19

Elevation Shadows

In the form shown, the various planes in the roof are neither vertical nor horizontal. The principle involved is that explained in diagram K (instalment ii), and a side elevation is necessary.

Consideration of the direction of light will show that the edge A B C D E F G H in the two elevations is a dividing line, and will cast a shadow on to the roof and wall. Points 1, 2, 3, and 4 are therefore chosen in the side elevation and projected upwards at 45 deg. to this dividing line, the method being similar to that in diagram 17 (instalment viii).

Horizontal lines are then drawn through points so found on the dividing line (in the side elevation), viz. J, K, L, and M, and through the points 1, 2, 3, and 4 to the front elevation. The points forming the shadow of the edge J K L M on the front elevation are found where lines at 45 deg. through these points cut the appropriate horizontal lines. There is, of course, a further dividing line NO at the back of the chimney. The shadow of this line, and the four points which limit the shadow of the rectangular horizontal surface at the top of the chimney, are obtained from the side elevation in the same way, care being taken rightly to identify the corresponding points in the two elevations. The shadow of the form at DEF, the corner of the gable end in front elevation, may be best understood by reference to the large-scale diagram 19*a*, where DS—ES is shown to be the shadow of DE. The dividing line of the dormer window on the right in front elevation is PQR (see also side elevation). The horizontal levels of the shadows of these points are found on the side elevation and projected to the front elevation to intersect with lines at 45 deg. drawn through the points to give the front elevation shadow.

Plan Shadows

Points in the shadow outline of the gable and chimney on the roof surfaces are determined by projecting lines downwards from the front elevation to cut lines at 45 deg. through the salient points in the plan. Consideration of the side elevation, and the direction of lighting, will show that the plan surface RS is in shade. The line TU in plan will therefore be a dividing line. The shadows on the ground are then obtained by projecting points V, W, X, Y, Z, U, T, etc., through the *XY* line from plan and elevation.

(*To be continued*)

Architects' Conference at Eastbourne

The two-days conference of the South-Eastern Society of the R.I.B.A. took place at Eastbourne.

Mr. R. Goulburn Lovell, A.R.I.B.A., the hon. secretary, in an address on "Beautifying our Surroundings," said there is no reason why buildings of today should not be as charming to gaze upon as those built more than 100 years ago. Everything possible should be done to arouse and foster in each community a sense of pride in the beauties and amenities of their own town or village. During recent discussions between architects and medical men, it became evident that much serious illness could be prevented by a closer co-operation of the two professions.

Sir Banister Fletcher described the R.I.B.A. as a great imperial confederation of architects, bound together not for self-advancement, but for the advancement of the art of architecture. He was glad to think the meeting might do something to bring about concerted action between the architects of the Society and the municipality.

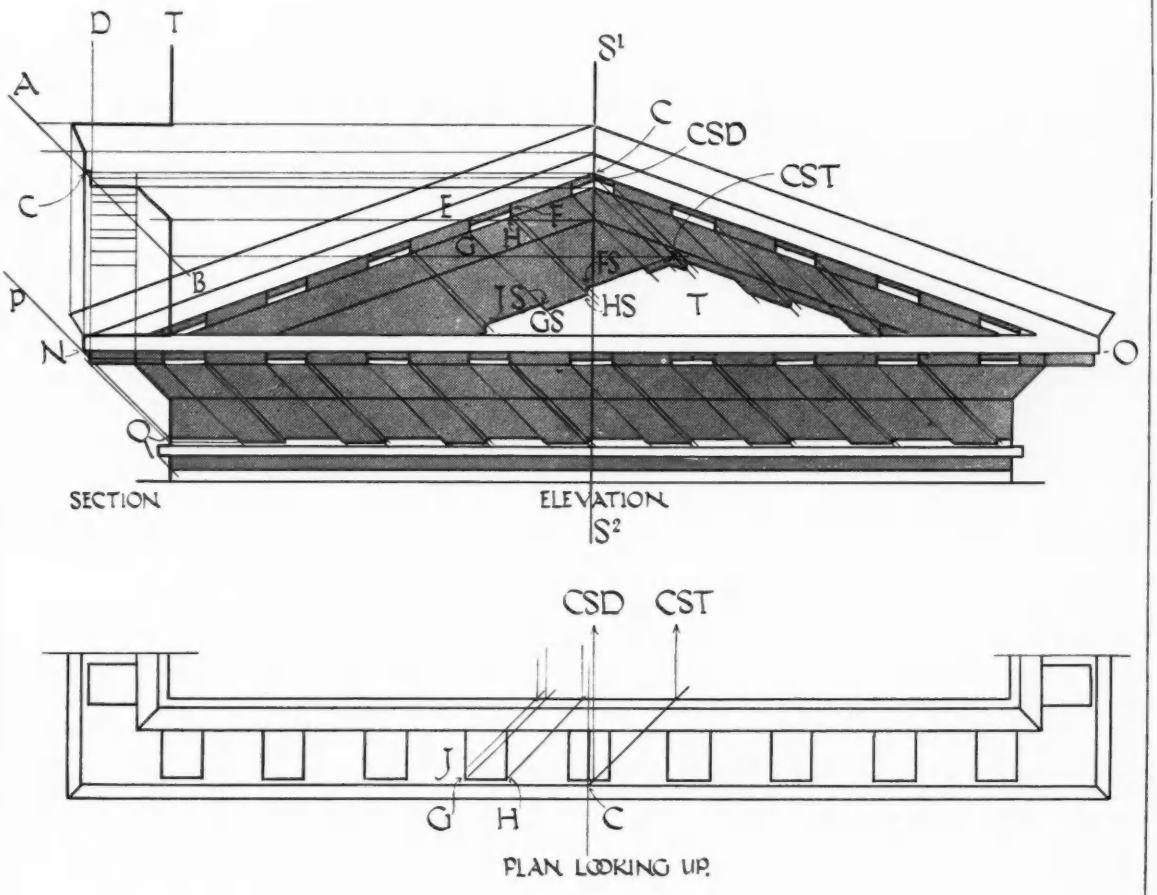


DIAGRAM 18.

Shadow Projection.] [*By John M. Holmes.*

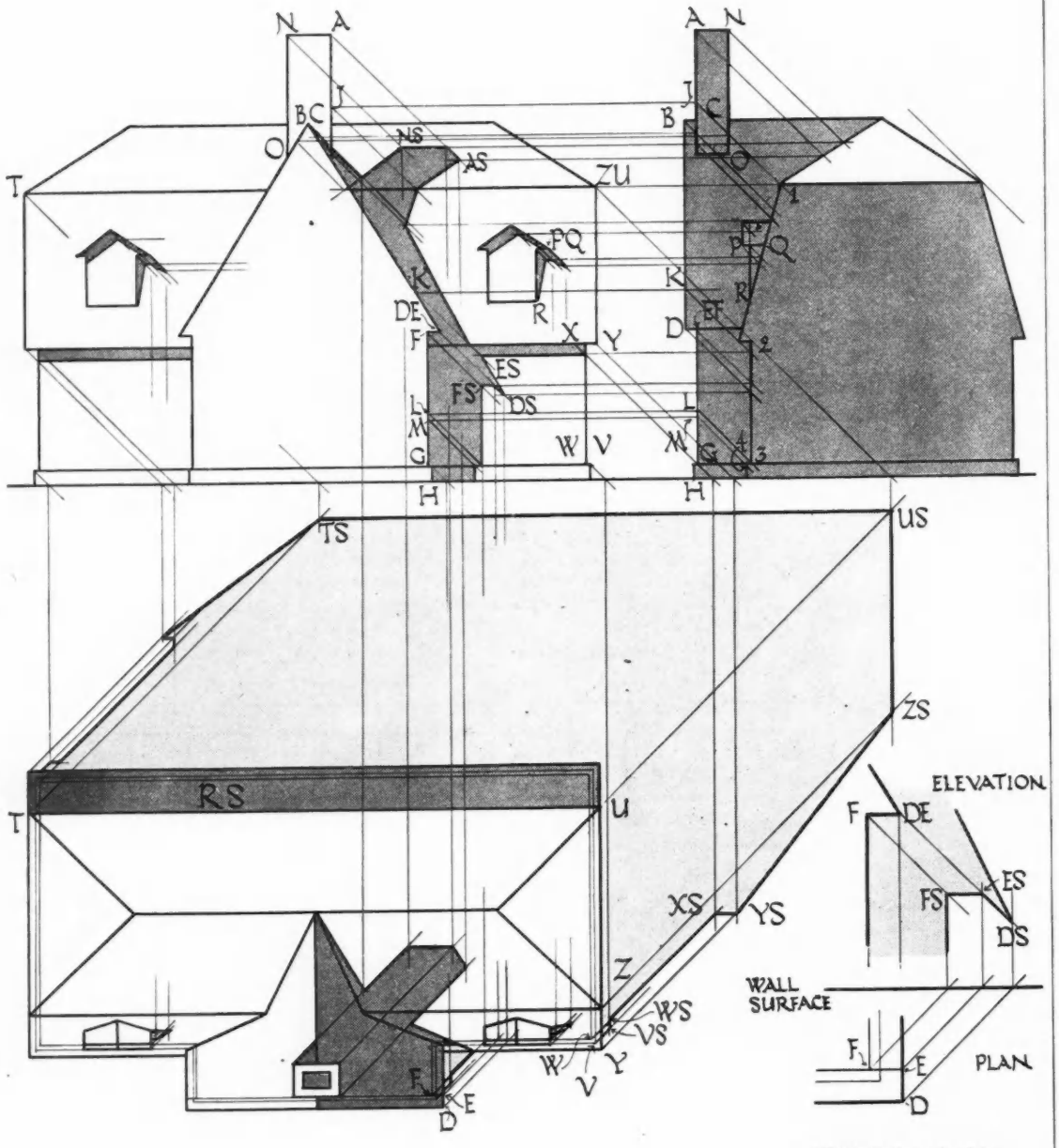


DIAGRAM 19a.

DIAGRAM 19.

Shadow Projection.] [*By John M. Holmes.*

TRADE NOTES

What is claimed to be one of the greatest feats in building construction ever attempted in this country is to be started in Manchester immediately. Messrs. Tootal, Broadhurst, Lee & Co., Ltd., are to have new headquarters in the heart of the city. The architect responsible for the design of the building is Mr. H. S. Fairhurst, F.R.I.B.A., of Manchester, who made a special trip to the United States to study typical American architecture of today. In height it will exceed by some 105 ft. the Manchester Ship Canal Company's offices, Manchester's present tallest building. The laying of the foundations, now in progress, provides depth for two floors beneath the ground level. The various floors will be served by seven passenger lifts.

The supply and erection of the steel framework for the first ten stories, which will be 96 ft. high, has been entrusted to Messrs. Banister, Walton & Co., Ltd., constructional engineers, Manchester. This firm has contracted to do the work in the short period of six months.

The total weight of steelwork used will be 3,200 tons, and some of the main stanchions, which contribute to support the weight of the building, will be capable of carrying 1,550 tons each. The stanchions will rest on steel rafts, or grillages, in order to distribute the weight on the solid concrete foundation 20 ft. deep.

Two twelve-ton electric guy derrick cranes will be constantly employed. The total cost of the building will probably be about £1,000,000.

The British Portland Cement Association, Ltd., recently invited a few friends to see a road being laid on a housing estate at Eastbourne on which coloured concrete had been used. The effect of the colouring is to do away with the "dazzle" which is sometimes a defect of a white concrete road, and, in any case, the road is rendered more picturesque. The road inspected had been given a surface of a gravel character. All the qualities of a good gravel road were maintained and none of the defects were apparent; for instance, there was no dust, and, of course, in wet weather there would be no mud. It would seem that, with the use of colour, scope is given for making roads harmonize with their surroundings as by the use of local materials for building work.

Messrs. J. H. Sankey and Sons, Ltd., builders' merchants, of Canning Town, have opened showrooms in Tothill Street, Westminster. The showrooms are arranged on three floors and comprise, on the ground floor, a range of bays devoted to bricks, tiles, cements, decorating materials, etc., and a partly completed structure in the centre of the floor to give an opportunity to judge the effects of various bricks and tiles set in position. The upper floors include a range of bathroom fittings and fireplaces, with alternative kinds of wall and floor coverings.

Some interesting novelties are being shown at the North-Eastern Industrial Exhibition by Messrs. Adamsez, Ltd. There is a bathroom suite in "Adamesk" enamelled fireclay pottery, consisting of a rectangular bath, the "Derwent" lavatory with "Climax" pull-up waste, and a silent new low-down closet, with the flushing cistern supported on a column or pillar instead of brackets. All is in rich "Lavender" colour ware. The "Epic" multiple flushing arrangement is also on view. By means of this arrangement it is claimed that one ball-cock will supply a dozen closet units. Examples of the firm's garden ware are shown in the laid-out grounds. The "Autofont" automatic fountain is exhibited for the first time.

An interesting booklet has been issued by Messrs. Shanks & Co., Ltd., to illustrate and describe their exhibit at the North-East Coast Exhibition at Newcastle-upon-Tyne. On the title page is a view of the exhibit. This consists of a building containing a series of bathrooms, which are illustrated in colour on subsequent pages, ranging from the simpler and less expensive to the more elaborate and costly schemes. These are fitted complete, and show the very latest in bathroom equipment, which should be a helpful guide to those who contemplate remodelling their bathrooms or building new homes. In order that the exhibit may serve this practical purpose, the firm have specified in addition to the actual sanitary appliances and accessories manufactured by them, details of the different materials and furnishings supplied from outside sources. The names of these suppliers are also given at the end of the booklet.

THE BUILDINGS ILLUSTRATED

Following are the names of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Residential Flats, Prince's Gate Court, Exhibition Road, South Kensington (pages 158 to 164), for Kensington Gardens Mansions, Ltd. General contractors, Messrs. F. G. Minter, Ltd., who also executed the Portland stone work; general foreman, Mr. Owen Johnson; contract price, £140,000; price per foot cube, 2s. 3d. Sub-contractors: W. Slater Edwards & Co., asphalt; St. Albans Brick Co., bricks; Stuart's Granolithic Co., Ltd., cills, artificial stone; H. Young & Co., structural steel; Caxton Floors, Ltd., fireproof construction; Roberts Adlard, tiles; Aerocrete Block-partitions; G. Farmiloe and Sons, Ltd., glass; Hollis Bros., oak floors; Bell's Asbestos Co., rubber flooring; J. Jeffreys, panel heating; Berkeley Electrical Engineering Co., electric wiring; W. N. Froy, Shanks & Co., and Leeds Fireclay Co., sanitary fittings; Nettlefolds, door furniture; A. E. Davis, window furniture; Berkeley Electrical Engineering Co., bells; Potter Rax, folding lift gates; S. W. Francis & Co., rolling shutters; C. A. and A. W. Hayward, iron staircases; Veronese, decorative plaster; Potter Rax and Cashmore Art Metal Workers, metalwork; Bratt Colbran, marble fireplaces; Anselm Odling, travertine; Carter & Co., Ltd., tiling; Messrs. Goff, garden furniture, shrubs and trees; Berkeley Engineering Co., lifts; Lindsay Saville, Ltd., interior furnishing to staircase halls.

New Cinema, Beaconsfield, Bucks (pages 167 to 169). General contractors, H. J. and A. Wright, Ltd.; Haden's, heating; Higgins and Griffiths, electric light fittings; Campbell Bros., decorations; De Jong's, fibrous plaster; General Electric Co., external electrical fittings.

In our issue for July 24 it was implied that the housing scheme at Larkhall was expected to cost £240,000. It should have been pointed out that this was the cost of the first section. The remainder of the scheme will provide between 1,200 and 1,300 flats and will, of course, cost much more.

The design of the house in Somerset, illustrated on pages 112 and 113 of our issue for July 17, should have been attributed to Stone and Francis, architects, of Taunton, Chepstow, and Minehead.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office, by our own patent expert. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

21598. Ackerman, H., and Scheidhauer and Giessing Akt.-Ges. Moulding apparatus for pressed stone blocks. July 13.

21334. Barty, T. Steam-heating apparatus. July 11.

20941. Case, G. O. Production of cementitious material. July 8.

21487. Chubb, W. F. Controls for gas-fired furnaces. July 11.

21257. French, H. R. Building-blocks. July 10.

SPECIFICATIONS PUBLISHED

314764. Humphris, F. Bricks, blocks, slabs, and the like.

314821. Clay, J. Clip, strap, or the like for roofing tiles, slates, and the like.

ABSTRACT PUBLISHED

312308. Bemis Industries, Inc., Boston, U.S.A. Buildings formed of standardized elements.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The governors of Colfe's Grammar School, LEWISHAM, are to provide a gymnasium.

Messrs. Grace and Farmer are to make alterations and additions at 1–4 Fenchurch Street, LONDON.

Middlesex Education Committee is to erect a school for about 350 children in YIEWSLEY.

Middlesex Education Committee is to erect a school for about 400 children in WEMBLEY.

Messrs. Courage & Co., Ltd., propose to reconstruct the "Railway Tavern" public-house, CATFORD BRIDGE.

The governors of Latymer Upper School, HAMMERSMITH, are to carry out improvements and erect a library.

Messrs. Constantine and Vernon, architects, are reconstructing 56 Tottenham Street, ST. PANCRAS.

Plans passed by the HACKNEY B.C.: Eight houses, Baker's Hill, for Messrs. J. Garey and Son; eight shops, Ridley Road, for Mr. A. Tate.

Messrs. Nathan Frost, Ltd., produce merchants, are to erect new business premises in Butler Street, SPITALFIELDS.

The governors of the Borough Polytechnic, SOUTHWARK, are to equip the remodelled premises at a cost of £10,000.

The governors of the Northampton Polytechnic, FINSBURY, are to erect extensions in St. John Street at a cost of £35,000.

Middlesex C.C. is to undertake alterations and additions to the BRENTFORD Court House, at a cost not exceeding £20,000.

ILFORD Corporation recommends a site at the junction of Eastern Avenue and Parham Drive for the erection of a branch library.

Middlesex Education Committee is to provide additional elementary school accommodation for about 300 children in RUISLIP.

Middlesex C.C. is to adapt premises in Great George Street, WESTMINSTER, for county offices at a cost of £12,500.

Middlesex Education Committee is to erect a new school to replace the elementary school in Clayton Road, HAYES.

The Gramophone Company of HAYES are negotiating with the Middlesex Education Committee for the purchase of the Clayton Road elementary school for extensions to their factory.

Mr. W. J. Lewis, architect, is to develop land abutting on Ley Street with a return frontage to Clifton Road, ILFORD, by the erection of shops and store thereon.

Plans passed by the ST. PANCRAS B.C.: Building, site of Woburn Lodge, Upper Woburn Place: amended plan of building, 209 and 211 Gray's Inn Road, next to Prospect Terrace.

The Metropolitan Asylums Board is to prepare plans for the provision of accommodation for eighty-eight nurses at the North-Eastern Hospital, LONDON.

The L.C.C. has selected various slum areas in LONDON representing a total of 95 acres for clearance and the rehousing of some 30,000 persons at a total cost of £4,600,000.

The Metropolitan Asylums Board has prepared plans for extensions and the erection of a nurses' home at the DOWNS Hospital for Children at a cost of £49,530.

Mr. John Murray is architect for the rebuilding of the block of property on the island site bounded by the Strand, Trafalgar Square, and Duncannon Street, WESTMINSTER.

The following buildings in the City of LONDON are to be reconstructed: 50 Vine Street; 23 Aldgate High Street; and 144 Queen Victoria Street.

Plans passed by SOUTHWARK B.C.: Building, 65, 67, and 69 New Kent Road, for Mr. T. F. W. Grant; rebuilding, 67 Holland Street, for Messrs. A. E. Hughes and Son.

ISLINGTON B.C. Housing Committee has approved the scheme prepared by the architect for the erection of houses on the Highcroft Road site, and tenders are to be invited.

The City of LONDON Corporation is arranging for an improvement in connection with a scheme for rebuilding 10, 11, and 12 Little Trinity Lane, 2 Huggin Court, and 1, 10, and 11 Huggin Lane.

The L.C.C. Education Committee has approved plans for the erection of a secondary school for 450 boys at FOREST HILL at an estimated cost of £40,000.

WANDSWORTH B.C. has instructed the borough engineer to prepare a layout plan for the proposed swimming baths to be erected on the Manor Street site, Clapham.

Herts Education Committee has approved sketch plans prepared by Mr. S. Dawe, of Watford, for the enlargement of the WATFORD School of Science and Art premises and the erection of an annexe.

WANDSWORTH B.C. has now prepared the scheme for the reconstruction of the Wandsworth Plain area, provision being made for the erection of blocks of flats with 262 tenements and sixteen lock-up shops at a total cost of £190,000.

The L.C.C. has prepared the first section of the clearance scheme for the Carlisle Street area of MARYLEBONE, provision being made for the erection of seven blocks of dwellings at a cost of £175,000.

The Metropolitan Asylums Board has passed revised plans prepared by Messrs. Paine and Hobday, architects, for the reconstruction of the North-Western Hospital, LONDON, at a cost of £111,246.

Plans passed by FULHAM B.C.: Motor workshops, 93 Moore Park Road, for Mr. R. P. Wray; additions, 4a Little Stamford Street, for Messrs. G. W. Beattie, Ltd.; buildings, Palliser Road, for Messrs. Rowe and Binns.

The Guardians of the KINGSTON Union are considering the possibility of establishing a pathological and bacteriological department at the Kingston and district hospital, which would serve not only the hospital itself, but the surrounding districts.

HACKNEY B.C. has passed the following plans: Three-story buildings fronting 1–8 Anton Street, for Mr. C. G. Smith; buildings, Brooke Road and Nightingale Road, for Mr. H. W. Binns; garages, 65–67 Stamford Hill, for Messrs. Francis Dod & Co.

CROYDON Corporation recommends the appointment of an architect to prepare plans for extensions at the mental hospital for accommodating a further 100 patients.

Plans passed by HAMPTON U.D.C.: House, Ormond Avenue, for Mr. John Curtis; alterations and additions, "Royal Oak," Oak Avenue, for Ashby's Staines Brewery, Ltd.; additions, Metropolitan Water Board Employees' Club, Ashley Road, for Mr. R. J. Newman; house, Oak Avenue, for Messrs. H. Smith & Co.; twelve houses, Hatherop Road, and two houses, Holly Bush Lane, for Messrs. W. and A. J. Ellis.

Plans passed by the WIMBLEDON Corporation: Additions, Wimbledon Hill Hotel, High Street, for Messrs. R. J. and J. S. Thomson; sub-station to laundry, South Park Road, for Messrs. Christian and Sinclair; gas engine shed and distilled water store, for Lighting Trades, Ltd.; mantel factory, Ravensbury Terrace, for Mr. J. R. W. Maxwell; house, Home Park Road, for Mr. W. D. Key; permanent school building, Southey Road, Holy Cross Convent, for Mr. L. H. Shattock; house, Bathgate Road, for Mr. E. L. Hird.

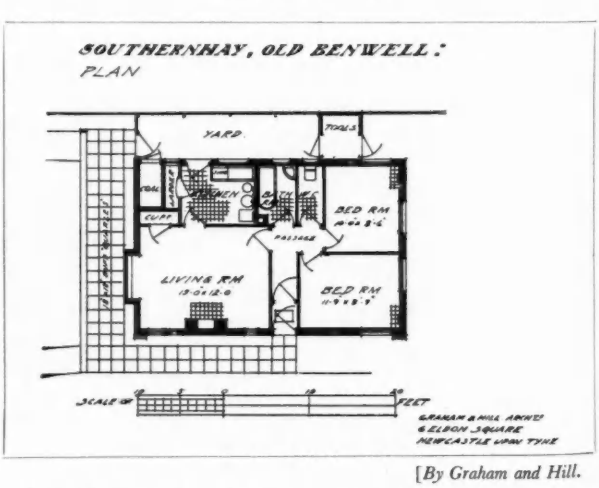
HORNSEY Corporation Estates Committee reports that there is ample space on the Broadway site, Crouch End, for extension. It is not possible, in the absence of any definite plan, to furnish estimates, but for the purpose of a general consideration of the proposal it may be assumed that a complete block of municipal offices, comprising Council Chamber and committee rooms and the usual accommodation (e.g. members' room and mayor's parlour, etc.), with offices for the present staff of each department, including education, could be provided at a cost of £100,000.

Plans passed by the HORNSEY Corporation: Alterations and additions, Hornsey Lane Farm, Stanhope Road, for Mr. F. T. Dear; two houses, Wood Vale, for Messrs. Smerdon Bros.; conversion of stables at Ken Wood Mansion into tenements, stores, and public conveniences, for Mr. G. T. Forrest, on behalf of the L.C.C.; sixteen houses, Priory Gardens, for Messrs. A. and A. A. Leopold; four houses, Page's Lane, for Messrs. A. E. Bailey and Sons; alterations and additions, 71 High Road, Wood Green, for Messrs. A. Davies & Co.; house, Denewood Road, for Mr. W. Quennell.

Plans passed by the WESTMINSTER City Council: Fire escape, balcony addition, Alhambra Theatre, Leicester Square, for Messrs. Adams and Gardner; shop alterations and additions, 215 and 216 Piccadilly, for Mr. W. H. White; building, Dorchester House site, Park Lane, for Messrs. Mewes and Davis; building, Grosvenor House site, for Messrs. Wimperis, Simpson and Guthrie; building, island site, Trafalgar Square, Strand, for Mr. J. Murray; refacing front, 49 Mount Row, for Messrs. T. P. Bennett and Son; alterations and additions, Savoy Hotel, Carting Lane, for Savoy Hotel, Ltd.; building, 160 and 162 Victoria Street, for Mr. G. Coles.



Bungalow at Benwell, Newcastle-on-Tyne.]



[*By Graham and Hill.*

Photograph and plan of a bungalow specially designed to aim at labour saving for two occupants in indifferent health. External walls are of cavity brickwork, rendered with cement and dashed with white cement and crushed brick, with stone dressings; the roof is of hand-made sand-faced Sussex pantiles. Internal partitions are of breeze blocks; all internal walls are distempered and the woodwork stained.

Plans passed by the ILFORD Corporation: Six shops and dwellings, Ley Street, for Messrs. Haines and Warwick, Ltd.; two houses, Canterbury Avenue, for Mr. A. P. Griggs; alterations, engineer's office and carpenter's store, Roden Street, for Ilford, Ltd.; twenty-three houses, Grangeway Gardens, for Mr. H. Smith; boiler-house and cokehole, Ratford's factory, Grove Road, for Messrs. J. T. Luton and Son, Ltd.; alterations, 279 High Road, for Messrs. Haines and Warwick, Ltd.; two houses, Woodford Avenue, for Messrs. A. Smith and Son; seven houses, Chelmsford Gardens, for Mr. A. P. Griggs; new premises for the John Bodger Store, Ltd., Station Road, for Mr. W. D. Key; three houses, Beaumont Gardens, Ashurst Drive, for Mr. F. S. Russell; four houses, Canterbury Avenue, for Mr. A. P. Griggs; four houses, Lonsdale Gardens, Eastern Avenue, for Suburban Dev. (London), Ltd.; five houses, Quebec Road, for Mr. C. Fryatt; four houses, Campbell Avenue, for Mr. H. W. Christophers; ten houses, Highcliffe Gardens and Redbridge Lane, for Mr. T. Anders.

SOUTHERN COUNTIES

Hampshire C.C. has voted £35,000 in connection with the erection of new offices in Castle Avenue and Castle Yard and authorized the WINCHESTER Castle Committee to take steps to make temporary provision for further office accommodation at Winchester, and, in the event of it not being found possible to hire accommodation, to incur expenditure in the provision of temporary hutments to an amount not exceeding £2,000.

SOUTH-EASTERN COUNTIES

BEXHILL Corporation is to consider the advisability of providing an open-air swimming pool.

HERNE BAY U.D.C. has instructed the surveyor to prepare plans and specifications for reconditioning the town hall.

BRIGHTON Education Committee has obtained sanction to borrow £52,780 for the erection of new premises for the municipal secondary school for boys.

BRIGHTON Corporation is to obtain tenders for the rebuilding of 179 and 180 Western Road in accordance with the plans prepared by Messrs. T. Garrett and Son.

Mr. G. W. Warr, on behalf of Mr. Kenneth Loader, has prepared a lay-out plan for the lower portion of Peacock Lane, Patcham, near BRIGHTON.

The borough engineer of BRIGHTON has prepared a preliminary plan showing a lay-out for a housing estate at Rottingdean, near New Barn. The actual housing site provides accommodation for about thirty houses.

Plans passed by NEWPORT (Isle of Wight) Corporation: Alterations and additions, Wesleyan Sunday School, Pyle Street, for Mr. A. Elderfield; additions, 34 Orchard Street, for Mr. E. W. Jenkins; alterations, 43 High Street, for Mr. G. F. Quinton.

Plans passed by the GRAVESEND Corporation: Two houses, North Ridge Road, for Messrs. Burvill and Steen; additions and alterations, Trafalgar Shades, Augustine Road, for Messrs. Charrington & Co., Ltd.; alterations to premises, Milton Road, for Mr. T. Bennett, on behalf of Messrs. Schultz and Son; two houses, Old Road, for Messrs. R. Hopkins and Sons.

Plans passed by the HERNE BAY U.D.C.: Annexe to "Rest Haven," Grand Drive, for the Salvation Army; bungalow, Reculver Road, for Mr. W. Hancock; alterations, The Rose Inn, Mortimer Street, for Messrs. Shepherd Neame, Ltd.; two bungalows, Albany Drive, for Messrs. Markwell's; alterations and additions, Holiday and Convalescent Home, St. George's Terrace, for Mr. B. E. Dixon; five bungalows, Central Avenue, for Messrs. Goodwin and Russell; bungalow, Bournemouth Drive, for Mr. A. V. Moore; bungalow, Pier Avenue, for Mr. A. Keeler.

Plans passed by PORTSMOUTH Corporation: Two Shops, High Street, Cosham, for Mr. A. A. Carter; alterations and additions, Majestic Cinema, for Mr. R. W. G. Stoeks; alterations, Westminster Branch Bank, Osborne and Palmerston Roads, for Mr. F. J. Privett; cooper's shop, South Street, for Portsmouth and Brighton United Breweries, Ltd.; new street, continuation of Kensington Road, for the Wardens of Winchester College; four shops, Copnor Road, for Messrs. Tanner Bros.; four houses, Chatsworth Avenue, Cosham, for Messrs. G. and W. Mitchell; shop, 245 Lake Road, for Mr. W. R. T. Willers; alterations, Albert Road, for the Apollo Kinematic Theatre, Southsea, Ltd.; warehouses, Cressy Place, for Brunswick Dyeing and Cleaning Co., Ltd.; two houses, Knowsley Road, for Mr. A. Phillips; battery room, Regent Cinema, London Road, North End, for H. and G. Kinemas, Ltd.; parsonage, new road north of Battburgh Avenue, for St. Mark's Parochial Church Council; shop, 18 Thomas Street, for Portsmouth and Brighton Breweries; dairy depot, Copythorn Road, for P.I.M.C. Society, Ltd.; business premises, London Road, for Messrs. Timothy White (1928), Ltd.

SOUTH-WESTERN COUNTIES

H.M. Office of Works is to erect a dockers' employment exchange at the City Docks, BRISTOL.

SWANSEA Corporation has leased land in Mayhill Road to Messrs. Rogers and Davies for the erection of fourteen houses.

BOURNEMOUTH Corporation Buildings Committee has approved plans submitted by The Carlton Cinemas, Ltd., for the erection of a cinema at Christchurch Road.

The Ministry of Health has approved the application of the PAIGNTON U.D.C. to borrow £10,000 for purposes of public walks and pleasure grounds at Roundham Head.

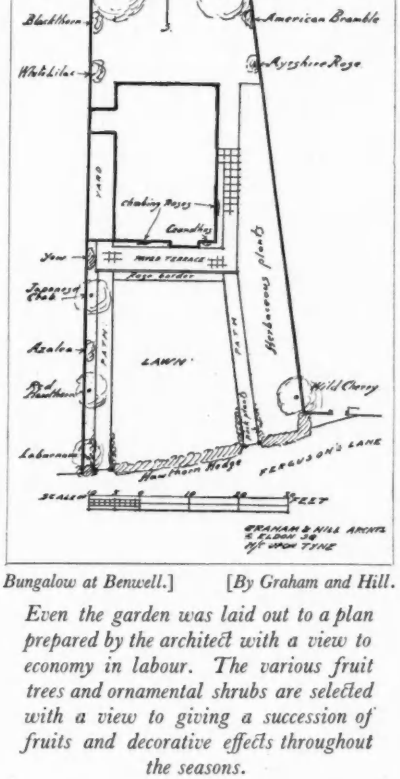
The SWANSEA Education Committee has instructed the borough architect to prepare plans for the erection of a new school for juniors and infants on a site at Cockett.

BOURNEMOUTH Education Committee has decided that preliminary steps be taken with a view of the erection at an early date of the second block of buildings for the Charminster Council School.

NORTHERN COUNTIES

The governors of HEMSWORTH secondary school have prepared a scheme for extensions.

BARNSLEY Corporation is considering a report of the medical officer as to extensions at Kendray Hospital.



Bungalow at Benwell. [*By Graham and Hill.*

Even the garden was laid out to a plan prepared by the architect with a view to economy in labour. The various fruit trees and ornamental shrubs are selected with a view to giving a succession of fruits and decorative effects throughout the seasons.

Messrs. Bentley and Shaw, Ltd., are to reconstruct the "Duke of Leeds" public-house, Greenfield Road, NEW MILL, Yorkshire.

The governors of St. Andrew's Hospital, NORTHAMPTON, are acquiring premises in Billing Road for conversion into a nurses' home.

The Sutton trustees are to erect a further 106 houses at the Stoke Lodge estate, STOKE-ON-TRENT.

The BRADFORD Corporation is seeking powers to construct waterworks at an estimated cost of £131,558.

The WAKEFIELD Corporation has decided to prepare plans for a public swimming bath on the Almshouse Lane site.

STOKE-ON-TRENT Corporation is to obtain tenders for the erection of houses at Collinson Square, Goldenhill, in accordance with plans prepared by the city engineer.

BIRMINGHAM Corporation is preparing schemes for the conversion of the Lodge Road fever hospital and "Uffculme," King's Heath, into mental hospitals.

Plans passed by the STALYBRIDGE Corporation: Shop, Hamilton Street, for Mr. F. Ainsworth; conversion of premises, Mount Street, for the Manchester City Mission.

The County Councils of CUMBERLAND and WESTMORLAND are to acquire Dovenby Hall Mansion and 166 acres of land, including the timber thereon, for the purpose of an institution for the care of mental defectives.

The MANCHESTER Corporation Town-Planning Committee has approved the proposal to make provision for a road forming an eastern bypass to Manchester, and authorized negotiations with the Stockport County Borough and the Failsworth U.D.C. as to the continuation of the proposed road within their respective areas.

Plans passed by the SHIPLEY U.D.C.: Shop, Gaisby Lane, for Mr. F. Dalby; extension to works, Dockfield Road, for the Bradford Gas Engine Co., Ltd.; four houses, Thackley Old Road, for Messrs. Dawson Bros.; extension to canal iron works, Lower Wharf Street, for Messrs. J. Parkinson and Son.

Plans passed by the OSSETT Corporation: House, Kingsway, for Miss N. Laycock; house, Kingsway, for Mr. F. Handley; house, Kingsway, for Mr. A. Giggal; house, Kingsway, for Mr. T. Taylor; dairy, Hill House Farm, Pildacre, for Mr. Thomas Summerscales; dairy, Westfield Farm, Wesley Street, for Mr. E. Harrison.

NORTH-EASTERN COUNTIES

Plans passed by the YORK Corporation: Store and loading shed, Peaseholm Green, for Messrs. Adams Hydraulics, Ltd.; social hall, Fifth Avenue, for Tang Hall Estate Tenants and Allotments Association; alterations, James Street, for British Petroleum Co., Ltd.; classroom, Clifton, for the trustees for Clifton Wesleyan Church; pavilion, Fulford Road, for York Schools Athletic Association; two houses, Barmby Avenue, for Messrs. J. Allison and Sons; substations, Scarborough Bridge, Burton Stone Lane and Earl Street, for the York Corporation; alterations, 27 and 28 Coney Street, for Messrs. Montague Burton, Ltd.; additions, 10 and 11 Wenlock Terrace, for Fulford Road W.M. Club; new bank, St. Helen's Square, for Barclays Bank, Ltd.; house and shop, 175 Burton Stone Lane, for Messrs. H. Colman and Sons, Ltd.; additions to boiler-house, Bishopthorpe Road, for Messrs. J. Terry and Sons, Ltd.; additions, Burton Stone Inn, Clifton, for Tadcaster Tower Brewery Co., Ltd.; layout, Kilburn Estate, for Messrs. Harrowell and Agar; additions, 38 and 40 Bishopthorpe Road, for Mr. Stewart; two houses-Tadcaster Road, for Ainsty Building Estates, Ltd.; mission room, St. Barnabas Church, Leeman Road, for the Rev. A. E. Green; shed, Piccadilly, for United Automobile Services, Ltd.; new premises, Tang Hall Lane, for York Equitable Industrial Society, Ltd.; four houses, Manor Drive, for Messrs. Simpson Bros.

NORTH-WESTERN COUNTIES

Lancashire C.C. is to acquire property for a scheme for extensions at the county offices, PRESTON.

Messrs. Courtaulds have purchased a site at Ribbleton and Grimsargh, near PRESTON, for the erection of an artificial silk factory.

BIRKENHEAD Corporation has asked the borough engineer to prepare estimates of the cost of erecting three-story tenements.

BIRKENHEAD Education Committee has inspected sites in the grounds of the Thingwall Sanatorium in connection with the proposed erection of an open-air school.

Plans passed by the BIRKENHEAD Corporation: Twelve houses, Shrewsbury Road, for Messrs. William Griffiths and Son; conversion of mission hall into garage, Newburns Lane, for Mr. T. A. Jones; garages, Lorne Road, for Mr. W. A. Warwick; alterations to shops, 15 and 16 Market Place South; four houses, Elm Road, Prenton; alterations, 42 and 44 Alfred Road; six garages, Seymour Street and Hillside Road.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A	Barnard Castle	N.E. Coast	1 7½	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7½	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_1	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A	Consett ..	N.E. Coast	1 7½	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1*s.* 4*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; NAVVY, 1*s.* 4*d. per hour*; TIMBERMAN, 1*s.* 5½*d. per hour*; SCAFFOLDER, 1*s.* 5*d. per hour*; WATCHMAN, 7*s.* 6*d. per shift.*

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 10 0
Pit gravel, per yd.	0 15 0
Pit sand, per yd.	0 12 6
Washed sand, per yd.	0 13 0
Screened ballast or gravel, add 10 per cent. per yd.	
Clinker, breeze, etc., prices according to locality.	
Portland cement, per ton	£2 8 0
Lias lime, per ton	2 0 0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.	
Transport hire per day:	
Cart and horse £1 3 0 *Trailer*	£0 15 0
3-ton motor lorry 3 15 0 *Steam roller*	4 5 0
Steam lorry, 5-ton 4 0 0 *Water cart*	1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0 1 6
SPREAD and level, including wheeling, per yd.	0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0 10 6
TRIMMING earth to slopes, per yd. sup.	0 0 6
HACKING up old grano. or similar paving, per yd. sup.	0 1 3
PLANKING to excavations, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.	
IF left in, add to above prices, per ft. cube	0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick. per yd. sup.	0 2 1
DO. 6 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1. per yd. cube	2 3 0
DO. 6-2-1, per yd. cube	1 18 0
DO. in upper floors, add 15 per cent.	
DO. in reinforced-concrete work, add 20 per cent.	
DO. in underpinning, add 60 per cent.	
LIAS-LIME CONCRETE, per yd. cube	£1 16 0
BREEZE CONCRETE, per yd. cube	1 7 0
DO. in lintels, etc., per ft. cube	0 1 6
CEMENT concrete 4-2-1 in lintels packed around reinforcement, per ft. cube	0 3 9
FINE concrete benching to bottom of manholes, per ft. cube	0 3 0
FINISHING surface of concrete spade face, per yd. sup.	0 0 9

DRAINER

LABOURER, 1*s.* 4*d. per hour*; TIMBERMAN, 1*s.* 5½*d. per hour*; BRICKLAYER, 1*s.* 9*d. per hour*; PLUMBER, 1*s.* 9*d. per hour*; WATCHMAN, 7*s.* 6*d. per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0 0 10
DO. *6 in., per ft.*	0 1 3
DO. *9 in., per ft.*	0 2 3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 5 6
DO. *6 in., per yd.*	0 8 0
Portland cement and sand, see "Excavator" above.	
Leadwool, per cwt.	£2 0 0
Gaskin, per lb.	0 0 4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . 0 4 3
DO. 6 in., per ft. . 0 5 0
DO. 9 in., per ft. . 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0 8 3
DO. 6 in., per ft.	0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1*s.* 9*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; SCAFFOLDER, 1*s.* 5*d. per hour.*

London stocks, per M.	£4 5 0
Flettons, per M.	2 12 6
White facing bricks, per M.	5 0 0
Multi-coloured facings, per M.	7 7 9
Best red facings, per M.	7 7 9
Rubbers, 9¼ in., per M.	12 0 6
Staffordshire blue, per M.	9 5 0
Firebricks, 2½ in., per M.	9 0 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. *headers, per M.*	20 10 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	

Lime, grey stone, per ton	£2 11 6
Mixed lime mortar, per yd.	1 6 0
Dampcourse, in rolls of 4½ in., per roll	0 2 6
DO. *9 in. per roll*	0 4 9
DO. *14 in. per roll*	0 7 6
DO. *18 in. per roll*	0 9 6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32 0 0
DO. in cement do., per rod	34 10 0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0 1 0
BEDDING plates in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING do. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
DO. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
DO. picked stocks, per ft. sup. extra	0 0 7
DO. red rubbers gauged and set in putty, per ft. sup. extra	0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in. per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around gullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1¼ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

MASON

MASON, 1*s.* 9*d. per hour*; DO. *fixer*, 1*s.* 10*d. per hour*; LABOURER, 1*s.* 4*d.* per hour; SCAFFOLDER, 1*s.* 5*d. per hour.*

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 9
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 11 0
York templates sawn, per ft. cube	0 7 6
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	

HOISTING and setting stone, per ft. cube	£0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.	
PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup.	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do., per ft. run	0 1 4
HALF SAWING, per ft. sup.	0 1 0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	£0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 7 6
YORK SILLS, W. & T., ft. cub. fixed	1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0 1 3
DO. 2½ in. thick, per ft. sup.	0 1 6

SLATER AND TILER

SLATER, 1*s.* 9*d. per hour*; TILER, 1*s.* 9*d. per hour*; SCAFFOLDER, 1*s.* 5*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies			£13 0 0
Countess			25 0 0
Duchess			32 0 0
Old Delabole	*Med. Grey*		*Med. Green*
24 in. × 12 in.	£42 11 3		£45 1 0
20 in. × 10 in.	31 4 3		33 0 6
16 in. × 10 in.	20 18 0		22 4 9
14 in. × 8 in.	12 1 0		12 16 3
Green Randoms, per ton			8 3 9
Grey-green do., per ton			7 3 9
Green peggies, 12 in. to 8 in. long, per ton			5 13 9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead per lb.			£0 0 6
Clips, copper, per lb.			0 2 0
Nails, compo, per cwt.			1 6 0
Nails, copper, per lb.			0 2 2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M			£5 18 0
Machine-made tiles, per M.			5 8 0
Westmorland slates, large, per ton			9 0 0
DO. *Peggies, per ton*			7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms		6 7 0
Grey-green do.		5 9 0
Green peggies, 12 in. to 8 in. long		4 13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3 17 6
DO., machine-made do., per square	3 7 6
Vertical Tiling, including pointing, add per square	18*s.* 0*d.*
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1*s.* 9*d. per hour*; JOINER, 1*s.* 9*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Timber, average prices at Docks, London Standard	
Scandinavian, etc. (equal to 2nds):	
7 × 3, per std.	£22 0 0
11 × 4, per std.	30 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 5 0
DO. *T. and G., 1 in., per sq.*	1 5 0
Planed boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 1 4
Mahogany, Honduras, per ft. sup. of 1 in.	0 1 4
DO. *Cuba, per ft. sup. of 1 in.*	0 2 6
DO., *African, per ft. sup.*	0 1 3
Teak, per ft. sup. of 1 in.	0 1 3
DO., *ft. cube*	0 14 0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 4 9
DO. framed in floors, roofs, etc., per ft. cube	0 5 6
DO. framed in trusses, etc., including ironwork, per ft. cube	0 8 6
PITCH PINE, add 33⅓ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO. 3-ply per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0 0 4½
DO. 9 in. wide and over per ft. sup.	0 1 2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1⅛ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1⅛ in thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1⅛ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1⅛ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in. per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. 4 *in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. 3 *in., per yd.*	0	1	9
DO. 4 *in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. 4 *in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc. per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE OR SOIL, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour (plus allowances in London only);* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in. up to 2 ft. sup. per ft.	0	1	2
DO. 4 *ft. sup.* ,,	0	2	3
DO. 6 *ft. sup.* ,,	0	2	6
DO. 20 *ft. sup.* ,,	0	3	1
DO. 45 *ft. sup.* ,,	0	3	3
DO. 65 *ft. sup.* ,,	0	3	5
DO. 100 *ft. sup.* ,,	0	3	10
Rough plate, ⅝ in., per ft.	0	0	6½
DO. ¼ *in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.			

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, ⅝ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards. plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅝ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement.
Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	⅛ in.			¼ in.			⅜ in.			½ in.		
Qualities	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2½	5	4	3	7½	6	4½	8½	7	6
Alder	5½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1	0½	10
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1	6	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1	0	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, AUGUST 7

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.1. Indian Section: "Architecture." By Miss M. Chamot. **3 p.m.**
IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY, Imperial Institute Road, South Kensington, S.W.7. Exhibition of Royal Society of Arts Competition of Industrial Designs, 1929. Open daily until September.
BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Dark Races—I." By the Official Guide Lecturer. **3 p.m.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Lighting and Illumination." By G. Tilghman Richards. **12 noon.**

THURSDAY, AUGUST 8

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. 3 p.m. "Recent Acquisitions." By Miss M. Chamot. 7 p.m. **3 p.m.**
BRITISH MUSEUM, W.C.1. "Origins of Architecture—I (Greek)." By Cecil Hallett, B.A., F.S.A. **12 noon.**

FRIDAY, AUGUST 9

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. **12 noon.**

SATURDAY, AUGUST 10

Sunrise, 5.37. Sunset, 8.33.
R.I.B.A. Visit to U.S.A. s.s. "Ascania" due to arrive at Plymouth.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. 12 noon. Indian Section: "Sculpture." By Miss M. Chamot. 3 p.m. **12 noon.**

SUNDAY, AUGUST 11

R.I.B.A. Visit to U.S.A. Arrival of s.s. "Ascania" at London.

MONDAY, AUGUST 12

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Furniture (I)." By Miss M. Chamot. 12 noon. "English Furniture (II)." By Miss M. Chamot. 3 p.m. **12 noon.**
ARCHITECTURAL ASSOCIATION Annual Excursion to Germany. Last date for applications for tickets.

TUESDAY, AUGUST 13

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Sculpture." By Miss M. Chamot. 12 noon. "English Primitives." By Miss M. Chamot. 3 p.m. **12 noon.**
BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Dark Races—II." By the Official Guide Lecturer. **12 noon.**

WEDNESDAY, AUGUST 14

NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Some Caricaturists." By John Steegmann, M.A. **3 p.m.**
LONDON SOCIETY. Visit to Somerset House, Strand, and the Register Office. **3.30 p.m.**

FRIDAY, AUGUST 16

SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Lighting and Illumination." By G. Tilghman Richards. **12 noon.**

SATURDAY, AUGUST 17

Sunrise, 5.47. Sunset, 8.20.
HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, Excursion.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By L. O. Faraker. 3 p.m. "Italian Renaissance Furniture." By L. O. Faraker. 7 p.m. **3 p.m.**
WALLACE COLLECTION, Manchester Square, W.1. "French Furniture." By W. P. Gibson. **12 noon.**

MONDAY, AUGUST 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. "Spanish Architecture and Sculpture." By Miss M. Chamot. 12 noon. "Spanish Textiles and Pottery." By Miss M. Chamot. 3 p.m. **12 noon.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Landmarks of Electrical Discovery." By L. W. Phillips. **12 noon.**

TUESDAY, AUGUST 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Tapestries." By Miss M. Chamot. **3 p.m.**

WEDNESDAY, AUGUST 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Stained Glass." By Miss M. Chamot. **12 noon.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Travel by Road and Rail." By L. W. Phillips. **12 noon.**
BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Dark Races—III." By the Official Guide Lecturer. **3 p.m.**

THURSDAY, AUGUST 22

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Renaissance Furniture." By L. O. Faraker. "Etching." By Miss M. Chamot. **7 p.m.**
BRITISH MUSEUM, W.C.1. "Origins of Architecture—II (Roman)." By Cecil Hallett, B.A., F.S.A. **12 noon.**

FRIDAY, AUGUST 23

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By Miss M. Chamot. 12 noon. "Byzantine Art." By Miss M. Chamot. 3 p.m. **12 noon.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Lighting and Illumination." By L. W. Phillips. **3 p.m.**

SATURDAY, AUGUST 24

Sunrise, 5.58. Sunset, 8.5.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Eighteenth Century Furniture." By L. O. Faraker. 7 p.m. "Italian Decoration." By Miss M. Chamot. 7 p.m. **7 p.m.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Applications of Electricity." By L. W. Phillips. **3 p.m.**

MONDAY, AUGUST 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By Miss M. Chamot. 12 noon. "Northern Sculpture." By T. F. Wilson. 3 p.m. **12 noon.**
SCIENCE MUSEUM, South Kensington, S.W.7. "Noteworthy Engineering Achievements." By L. W. Phillips, M.I.E.E., A.INST.P. **3 p.m.**

TUESDAY, AUGUST 27

NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Architects from Wren to Adam." By John Steegmann, M.A. **3 p.m.**
WALLACE COLLECTION, Manchester Square, W.1. "French Furniture." By W. P. Gibson. **3 p.m.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Travel by Road and Rail." By L. W. Phillips. **3 p.m.**

WEDNESDAY, AUGUST 28

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Arts and Crafts." By T. F. Wilson, F.R.S.A.I. **3 p.m.**
NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Some Later Architects." By John Steegmann, M.A. **3 p.m.**
BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Dark Races—IV." By the Official Guide Lecturer. **12 noon.**

THURSDAY, AUGUST 29

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. **3 p.m.**
BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Middle Ages." By the Official Guide Lecturer. **3 p.m.**

FRIDAY, AUGUST 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By L. O. Faraker. 12 noon. "Chippendale." By T. F. Wilson F.R.S.A.I. 3 p.m. **12 noon.**

SATURDAY, AUGUST 31

Sunrise, 6.10. Sunset, 7.50.
A.A.S.T.A. Summer Tour to the Rhineland via the Ardennes and the Moselle. From the evening of August 31 to September 8 or 12.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Furniture of the Seventeenth Century." By L. O. Faraker. 12 noon. "English Furniture of the Eighteenth Century." By L. O. Faraker. 3 p.m. Indian Section. "Mogul Art." By T. F. Wilson. 3 p.m. "Eighteenth-century Furniture." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon.**

MONDAY, SEPTEMBER 2

WALLACE COLLECTION, Manchester Square, W.1. "English Portraits." By W. P. Gibson. **3 p.m.**
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Costumes." By L. O. Faraker. 12 noon. "Costumes of Seventeenth Century." By L. O. Faraker. **12 noon.**
BRITISH MUSEUM, W.C.1. (A) "Monuments of Egypt." (B) "Monuments of Assyria." By Official Guide Lecturers. **3 p.m.**

TUESDAY, SEPTEMBER 3

LONDON SOCIETY. Visit to the Church of St. Andrew-by-the-Wardrobe, Queen Victoria Street, E.C.4. **2.30 p.m.**

WEDNESDAY, SEPTEMBER 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

THURSDAY, SEPTEMBER 5

BRITISH MUSEUM, W.C.1. "Origins of Architecture—I (Greek)." By Cecil Hallett, B.A., F.S.A. 12 noon. "Early Britain—I (Old Stone Age)." By Cecil Hallett, B.A., F.S.A. 3 p.m. **12 noon.**

FRIDAY, SEPTEMBER 6

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 7

Sunrise, 6.21. Sunset, 7.34.
BRITISH MUSEUM, W.C.1. "Early Britain—II (Late Stone Age)." By Cecil Hallett, B.A., F.S.A. **12 noon.**
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section, Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

MONDAY, SEPTEMBER 9

ARCHITECTURAL ASSOCIATION Annual Excursion to Germany. Departure for Hamburg in s.s. "St. Louis."

TUESDAY, SEPTEMBER 10

ARCHITECTURAL ASSOCIATION Tour to Germany. Arrival at Hamburg.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture—I." 12 noon. "Architecture—II." 3 p.m. Both by L. O. Faraker. **12 noon.**

WEDNESDAY, SEPTEMBER 11

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 12

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. **12 noon.**

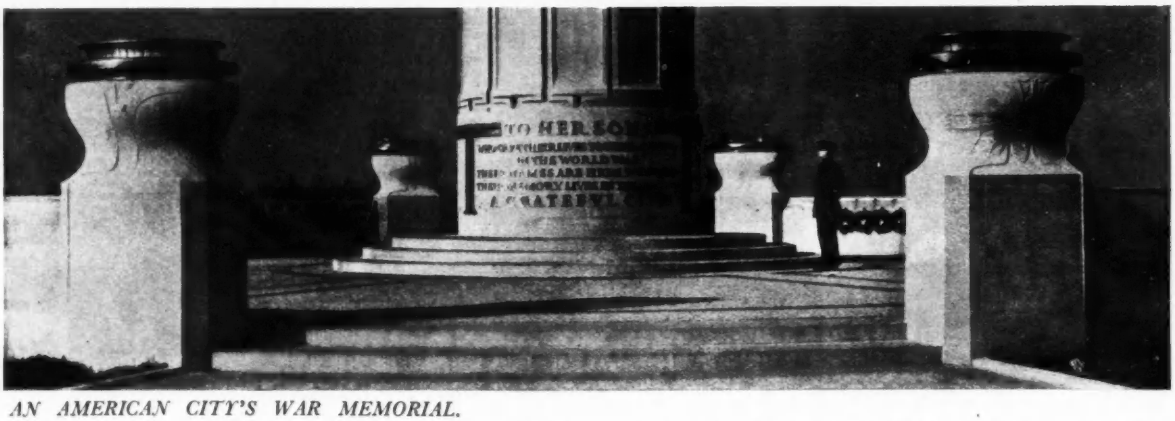
FRIDAY, SEPTEMBER 13

VICTORIA AND ALBERT MUSEUM. South Kensington, S.W.7. "Tudor and Jacobean Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 14

Sunrise, 6.32. Sunset, 7.18.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

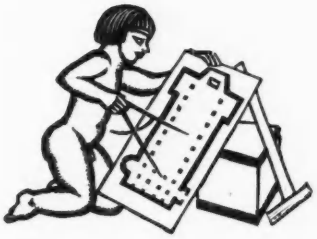




AN AMERICAN CITY'S WAR MEMORIAL.

H. van Buren Magonigle was architect and sculptor for the memorial at New Britain, a city in Hartford County, Connecticut, U.S.A. The lower view, on a larger scale, shows the inscription at the base of the column, and details of the urns.

THE ARCHITECTS' JOURNAL



WEDNESDAY, AUGUST 7, 1929

BUILDING FOR THE BEST

"*A foolish man which built his house upon the sand.*"

Gospel according to St. Matthew : vii. 26.

WHAT is the best house for Britain ?

If we could take a lesson from Palestine, which is largely of limestone formation and where the natives have practised building their towns on the summits of hills, we should certainly build upon rock; but unfortunately British builders have to place their houses on the foundation provided by their clients. And this foundation is most frequently clay; sound London clay in part, and weaker and more plastic clay or even mud in places. Water oozing up through the floor and in through the walls and roof are the accompaniments of British building when it is stripped not only of all excessive cost, but of ever so little increase.

Not an element of the complaints which have been raised by the R.I.B.A. in their report on damp houses but could be improved by the expenditure of more money. The cause of some of the defective buildings can be realized at once as the attempt to build subsidy houses of which the total cost was limited by the Government at starting, or houses in imitation of them.

A whole bevy of houses was pushed through upon sites which became flooded when the local streams rose above their level, and though this might have been an excellent test in the case of houses built upon rock, it was all too likely in the case of houses built upon clay to provoke such a fate as befell the Biblical example of the house built upon sand.

The pressing need for economy may be quoted as the chief reason for this unfortunate state of affairs, for one can hardly decide whether it is better to live in a house subjected to flooding or to live cramped in a squalid but waterproof room, which in some cases was the only alternative. After the war there was a great demand for houses at reasonable cost, of which the principal cause was a desire to escape the pressure of increasing rent; families left their rented houses and had new houses constructed at the cheapest possible rate during a period when by-laws were relaxed. They lacked many of the things that had been considered necessary in pre-war times. It is the lack of a damp-proof course, the solid as against the hollow wall, the leaky floor and roof and the general tendency for the building to crack that have led to criticism. Why were the by-laws relaxed ? They were based on sound common sense, and only the financial hardship of the time can excuse the leniency of the authorities.

That the architect put his best endeavours into making the most capacious building under these special conditions of relaxed by-laws is an undoubted fact. That the modern manufactured goods proved just a trifle too weak and upset his calculations is more a misfortune than a crime. In many instances where the experiment has been carried out on a dry subsoil everything has gone well.

It was difficult to realize till too late, either, that these strict economies demanded a close sympathy with the nature of the design, which should be as simple as possible if it was to be really cheap. Dormers, bay windows and porches had all to be omitted, and the simplest design carried through.

Then, apart from these questions of design, the war has brought in its own period of excessive costs and diminished strengths, for example, in poorer joists and dearer bricks; the one subject to dry rot and the other, if cheap, so underburnt as to peel away and to rot visibly, and if good, to be classed as frontage bricks and valued at an extraordinarily high rate.

Of course, the cure for the existing troubles is to return to safer and more orderly methods of calculation, based upon the now known strengths of the materials at our disposal. As for building on rock, it is an ideal as far away as ever.

NEWS & TOPICS

LIFE IN STONE

WHATEVER imprecations Sir Reginald Blomfield may care to hurl at the unrepentant head of Mr. Epstein, he will find supporters only among the "diehards" and the shocked "men in the street" for his suggestion that the thing is bluff. Bluff, indeed! This is the heart of the thing, in the words of a poet, A. S. J. Tessimond, whose words I make bold to quote at length:—

THE ARTIST.

They asked for evening like a tired woman bending over her child
and he gave them the hundred hard spears of morning.
They asked for a sanctuary in corridors of cloud
and he gave them a tightrope between two stars.
They asked for the insidious invitation of violins
and he gave them the glassbright challenge of acute clean oboes.

They asked for a mirror and a song to sing into it
and he gave them calipers and ruler to measure the sky.
They asked for a dream like a pool to reflect the moon
and he gave them a rock to climb to the sun.

The poem might have been written of Epstein, whose "Night" and "Morning" are no vague and sloppy abstractions, but the very truth of one man's conception of two great facts of life. "They evince," as Muirhead Bone says, "an intense desire to find anew the old sources of grandeur in sculptural art. I feel my imagination kindled here, and, recognizing this as an unusual reaction to the sculptured figures on a building, am content."

*

THE HAIG STATUE CONTROVERSY

We do get into hot water with our sculpture. Mr. A. F. Hardiman, designer of Lord Haig's statue, is the latest to feel the keen blast of criticism. Colonel Heath, general secretary of the British Legion, writes to the *Times* about it in no uncertain terms: "The horse is like nothing Lord Haig ever rode; the figure of the rider, a libel. . . . But it is with the spirit of the design . . . that our chief quarrel lies." And then he goes on to suggest the setting up of a small committee of well-known cavalrymen, who knew Lord Haig, and who know a horse, to advise. Without arguing the merits or demerits of this particular case, it does strike me that the general principle here advocated of lay veto is dangerous and to be deprecated.

*

RELICS OF QUEEN ANNE'S LONDON

Smith Square is, of course, one of the really unexpected corners of London. Hidden behind the towering buildings of the Embankment, and backed by slums in gradual process of polite rebuilding, it has yet managed to preserve its identity with a completeness denied to the other relics of Queen Anne, mixed up in the great hurly-burly. The peculiar charm of Smith Square, plainly evident in the quiet little façades illustrated here, might easily have gone under, had it not become fashionable to live in a colony of intelligent people who must be select, if for no other reason than that there are only a street or two of houses to go round. If ever you would see a reflowering of taste, and upon the same stem, as it were, go to Smith Square and compare the new town houses that have



Queen Anne buildings in Westminster. The placard on the corner house on the right reads "Smith Square, 1726."

sprung from the sites of demolished cottages with these others, the relics of Queen Anne. No one could deny the sane modernity of the newer buildings, though their prototypes face them across the narrow street.

*

WHEN BUILDING WAS BANNED

In 1580, eight years before the Armada, Elizabeth issued a proclamation forbidding the erection of new buildings in London where none had existed before in the memory of man. Does this not conjure up pictures of a pleasant London, "open to the fields and to the sky," as one said, coming later? And yet this proclamation was an attempt to keep down the ever-recurrent plague—a dismal reverse side to the picture. London, small as it might be, was crowded, infested with beggars and lacked air and room to walk. And so it continued until the Great Plague and Fire came to destroy it all. Even after that, Cromwell in 1657, and Charles II in 1674, made vain attempts to stem the tide, but the growth continued, and the town swelled into a metropolis and threw out shoots far afield until it is today the terrifying beast we know not quite how to tame.

*

TO MAKE THE "BLACK COUNTRY" BLOSSOM

It has been suggested by Mr. Prentice Mawson that the devastated areas of the Black Country, the miles of pit mounds, alternating with depressing marshes of sunken land, could be made, with little capital expense, to flower again. Black as they are, grasses take root and chance-blown seeds spring to flower, without the intervention of man. They are, in truth, quite well adapted to become sports grounds, parks, and semi-cultivated reservations. Even villages, as at Bilston, can be built upon the levelled tops of pit mounds, and their gardens flourish. Perhaps even trees might take root and grow. At all events the

experiment would be worth trying. The time has come when we should look with new eyes upon what we learned as children to call the "Black Country"—damning it out of pure ignorance. The fact that we know a slag heap to be made up of waste products does not of itself make the heap ugly. Some of these great heaps, with their peculiar conical outline, are unusually grand, with all the strangeness of unaccountability, rising as they do amid a landscape that knows them not. Last week I passed by Avebury Hill, which is accounted one of the seven wonders of Britain, the finest megalithic remain in Europe. It lacks but an engine-house at its base to relate it to the works of man.

*

FUNCTION THAT DICTATES FORM

It must be the experience of most designers concerned with any object of utility whatever that inanimate materials have a queer way of dictating the ultimate outward form. This is really what we recognize when we say that an elevation of a building erected for some particular purpose expresses its function. Similarly, many an author has confessed that, once he has imagined and created his characters, they are apt to take the reins into their own hands and surprise him by their evolutions. The contour of the modern locomotive, with its dwarfed smoke-stack, and high, straight lines, so suggestive of strength and fleetness, was dictated, so I am told, by the expediency of raising the centre of gravity as compared with older practice, rather than by any æsthetic considerations. The layout of the new Air Park at Heston, which is illustrated elsewhere in this number, is a striking example of the operation of this dimly-recognized law. Mr. Austin, the architect for it, told me that when he came to lay out on his board the general lines of the scheme, he noticed that his building outlines were suggestive of an aeroplane as seen in plan. And, do what he would, he could not get away from it. No other arrangement gave equal facilities; and eventually he decided to make a virtue of the unanticipated necessity and accentuate the resemblance.

*

A WIDER, DEEPER KINGSWAY TUNNEL

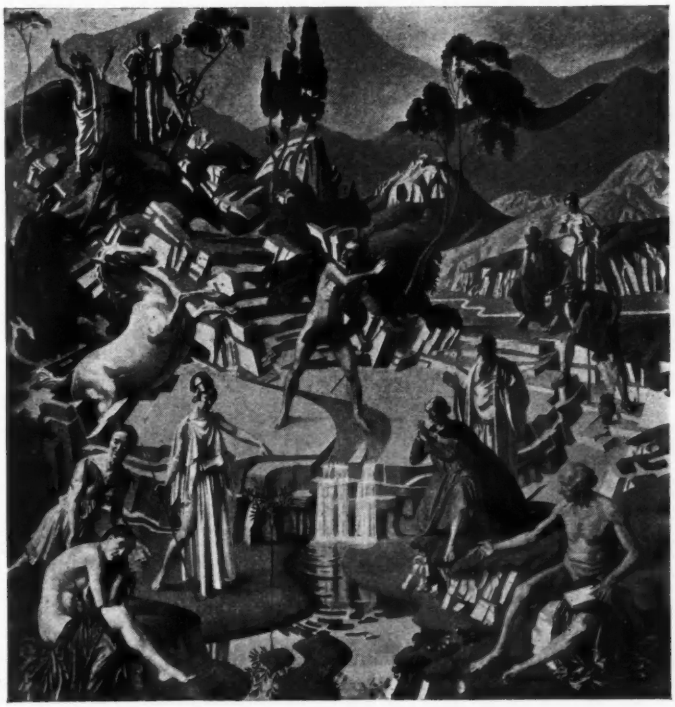
There is much to be said for Captain Swinton's suggestion that the subway running under Kingsway from Theobald's Road to the Embankment, which is to be deepened to allow the passage of double-decked trams, should at the same time be widened or otherwise adapted to the use of all traffic. As he points out in his letter to the *Times* of July 29, this tunnel offers a route across the congested waist of London, unblocked by any cross traffic. It would do what the new Charing Cross Bridge will be unable to do, that is, deliver north-south traffic across not only the Strand, but Oxford Street as well. How the tunnel could be adapted I don't know, but since the Ministry of Transport have pressed the question in the past I have no doubt that there are no insuperable objections.

*

MURAL DECORATION FOR THE ATHENÆUM, LIVERPOOL

The mural decoration reproduced here is one of three panels painted by Mr. E. H. Halliday for the library of the new Athenæum at Liverpool. This canvas, the smallest of the three, measures 5 ft. square, and is sunk into green painted panelling over the fireplace. It represents the contest between Athene and Poseidon for the patronship of Athens. Each was to present a gift to the city. Poseidon, striking the rock, brought forth water and a horse, but Athene produced an olive tree, which was acclaimed the most useful gift—and so it proved to be, for Athens grew rich out of olive oil. The decoration is painted in cool tempera colours, with a definition that suggests the rare atmosphere of Greek mythology, set amid mountains that recede into a distance of deepening blues and purples.

ASTRAGAL



A mural decoration for the Athenæum, Liverpool (illustrated on pages 194-8 of this issue). This painting, in cool tempera colours, of the contest of Athene and Poseidon for the patronship of Athens, by Mr. E. H. Halliday, is destined for the library. Mr. Halliday was Rome scholar in 1925, and is now working in London.

THE ATHENÆUM, LIVERPOOL

DESIGNED BY WILLINK AND DOD

LIVERPOOL'S literary institution, the Athenæum, was founded in 1798, to meet the needs of eighteenth-century citizens for "a public library of well-selected books in all the useful, as well as ornamental, branches of knowledge." The original building, in Church Street, designed by John Foster, architect to the Liverpool Corporation, remained its quarters until the decision, in 1923, to widen Church Street. Seeing that the Corporation had, in 1802, made a free grant of the site originally purchased, leasehold, by the Athenæum from them, certain terms were made. They included the payment of £7,000 by way of compensation for disturbance, and the erection of a new building, completed some six months ago and now illustrated in these pages, at the cost of the city, on a corner of St. Peter's Church site. The contract price was fixed at £39,832.

It is of four stories, in Portland stone, with a main frontage to, and entrance in, Church Alley. Though the general conditions governing the rebuilding developments in the vicinity have been observed, as, for example, in the cornice level, it has been the aim of the architects to give it an individual character.

Most of the ground floor space is allocated to shops, but there is an entrance vestibule and lobby, giving access to the circulating library room and to the hall, from which ascends the elliptical staircase that is a feature of the planning. On the first floor are cloakroom and lavatory accommodation, a smoke-room, and the news room (74 ft. by 37 ft.), without which an Athenæum would be unthinkable. In years gone by it served as a kind of informal parliament for town councillors—an ante-room to the council chamber itself. The library and stack-room, accommodating the 36,000 volumes now owned, occupy most of the second floor, though space is found for a committee room. On the top floor are the dining- and smoking-rooms, with the necessary kitchen and service accommodation.

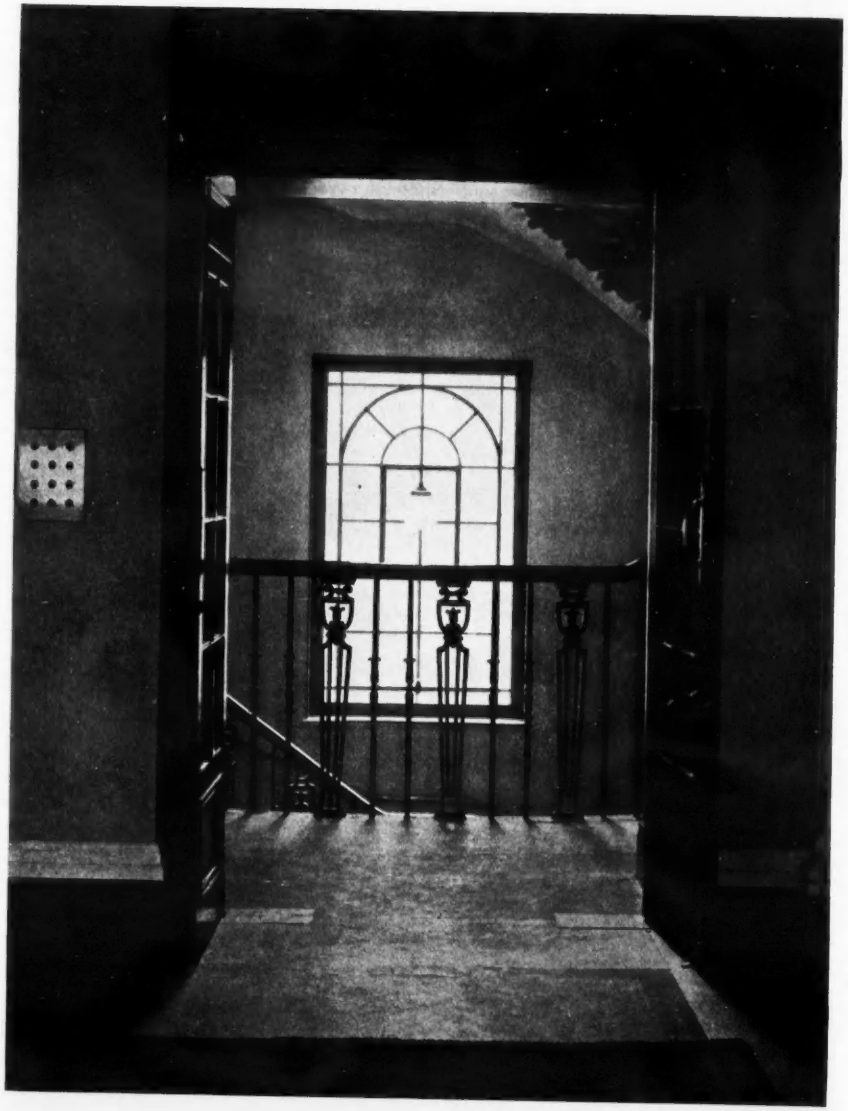


The exterior and main entrance from Church Alley. Though much of the ground floor is set apart for shops, the upper floors are entirely devoted to the purposes of the institution.



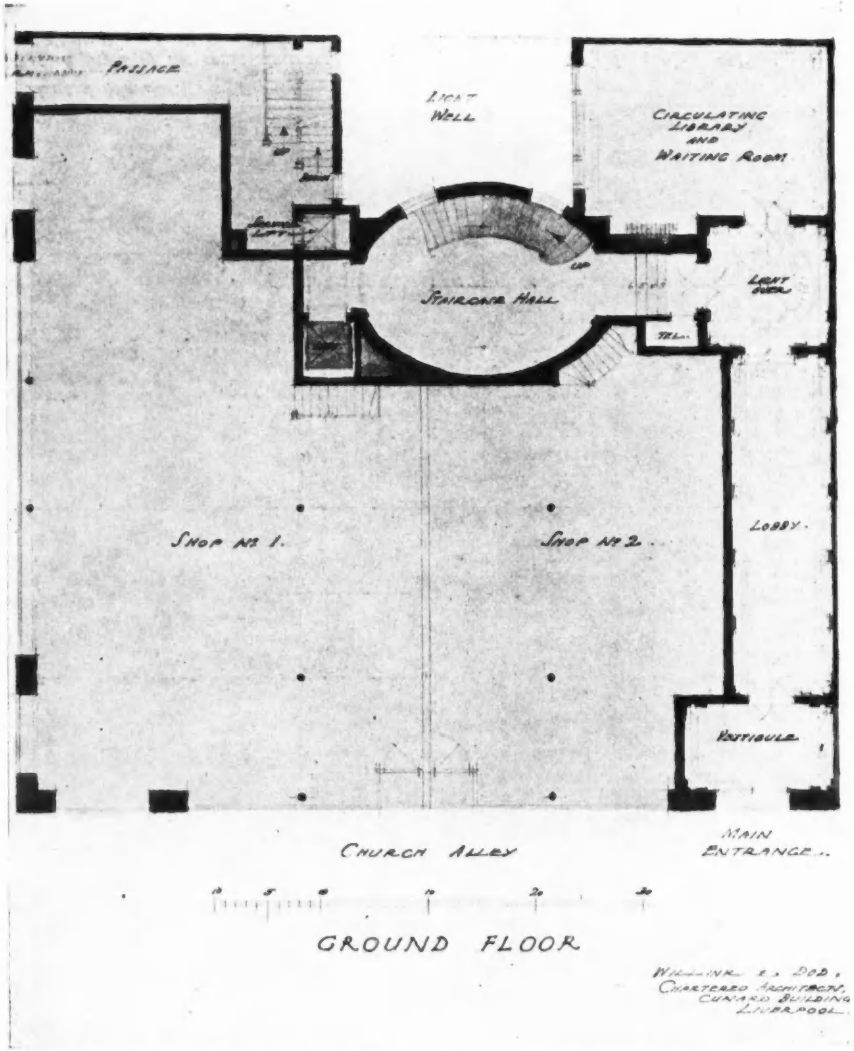
Liverpool Athenæum.]

A flight of the main staircase, the well of which is elliptical in plan and extends through all floors. There are also service stairs, entered from School Lane.

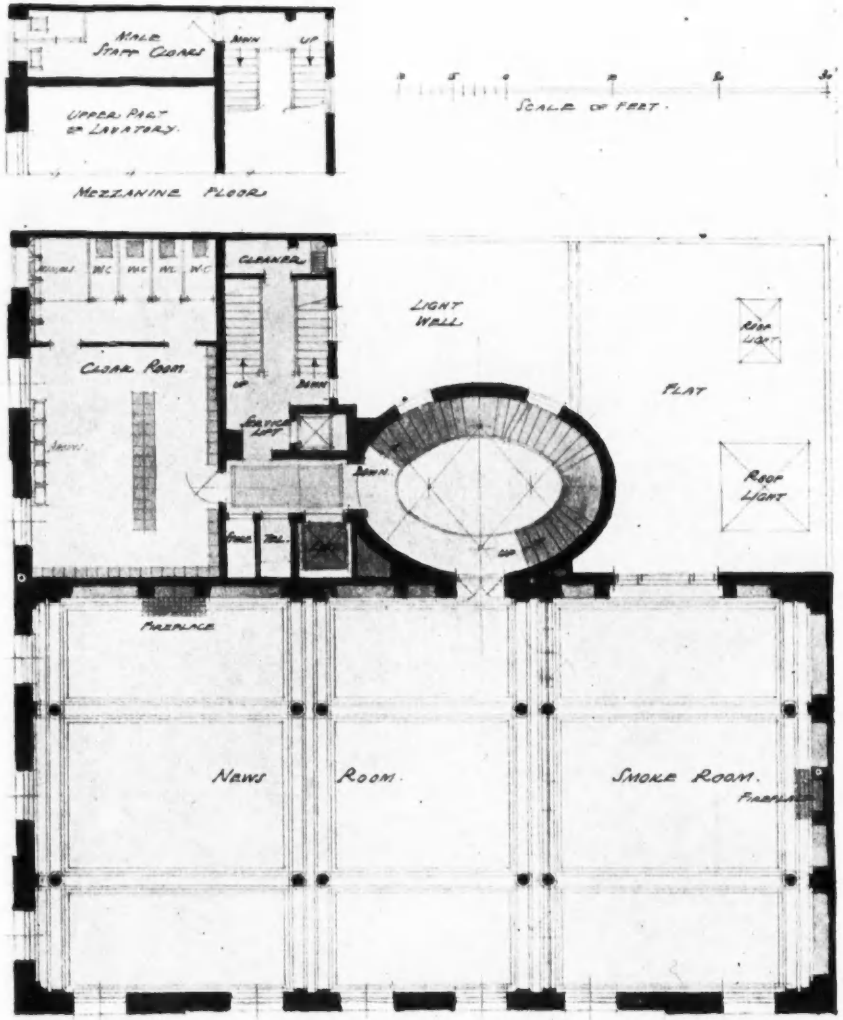


[*By Willink and Dod.*

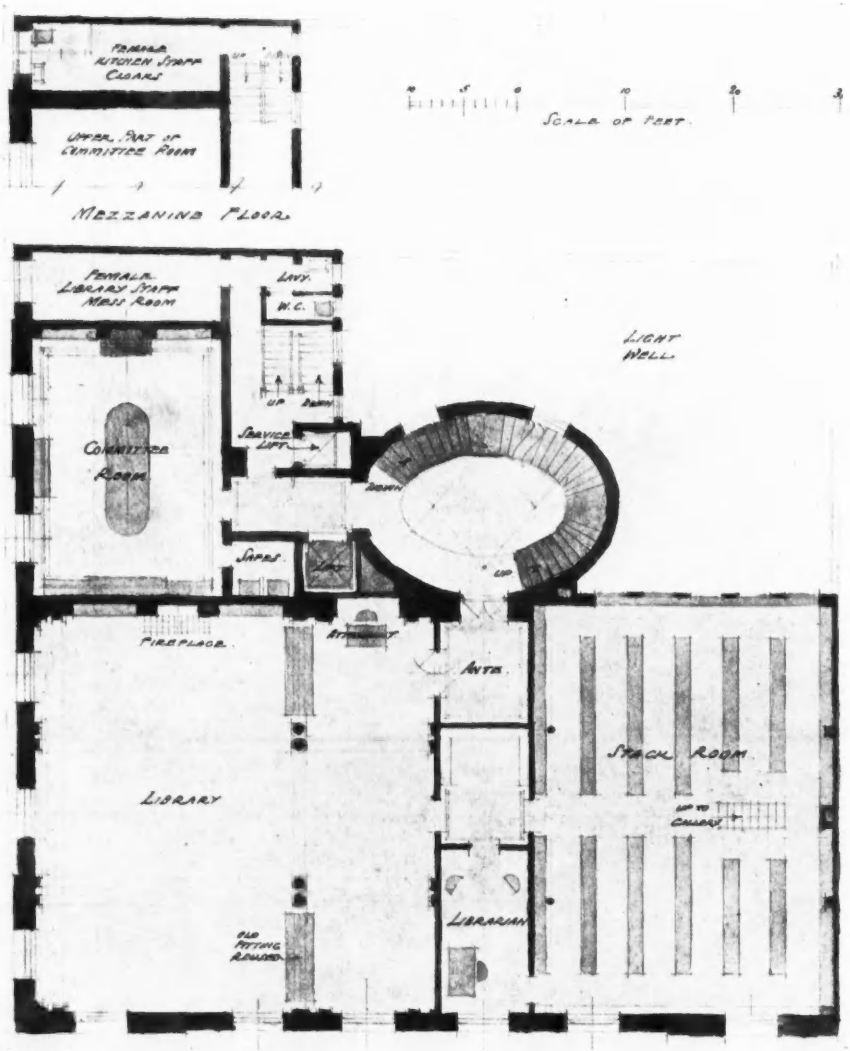
Looking on to the main staircase from the double doors of the news-room, on the first floor. This landing also serves the cloakroom.



The architects' plan drawing of the ground floor. From the vestibule, entered from Church Alley, a corridor-like lobby leads to an inner entrance hall, serving the waiting-room and circulating library and the main stairway, which imparts character to every floor. The large shop area is entirely separate, the service entrance to the Athenæum being in School Lane (on the left of the plan).

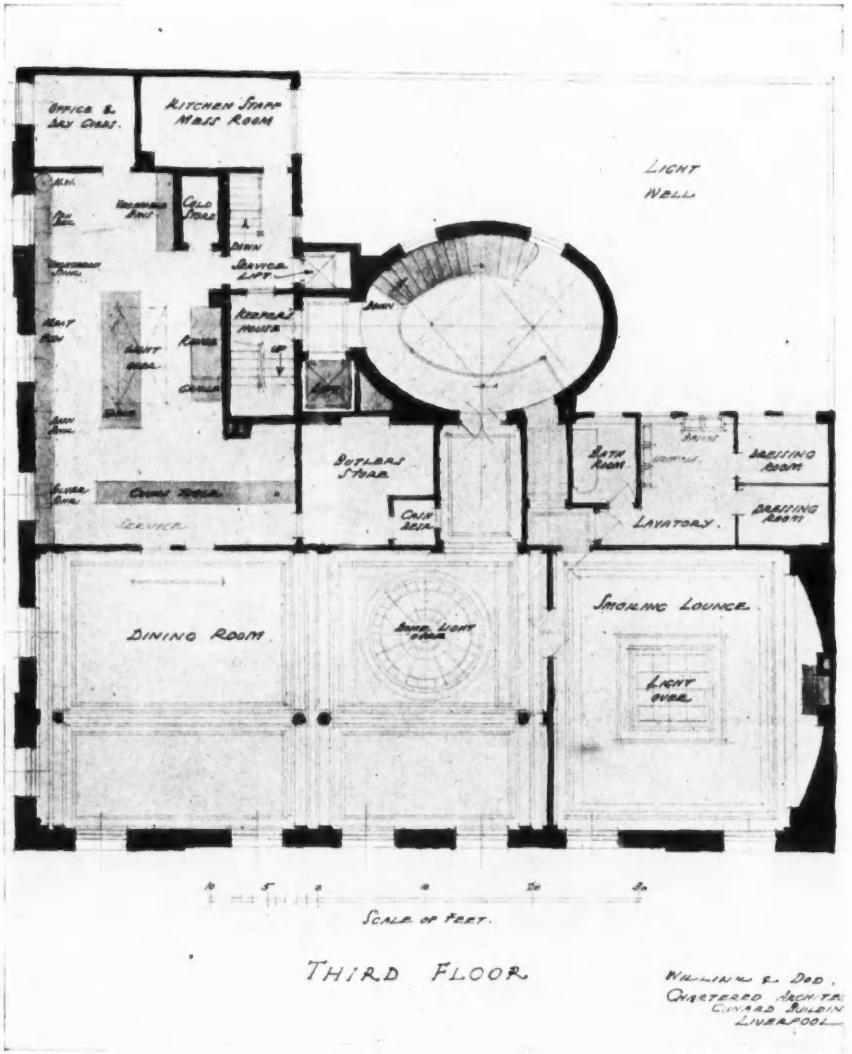


Plan of the first floor. The pillared news-room and the smoke-room, connected to it by double doors, occupy most of the floor space. It will be noted that this is reduced, as compared with the ground-floor plan, the circulating library and inner entrance hall shown thereon having a flat roof, with light well above. A mezzanine floor is worked in in the service quarters.



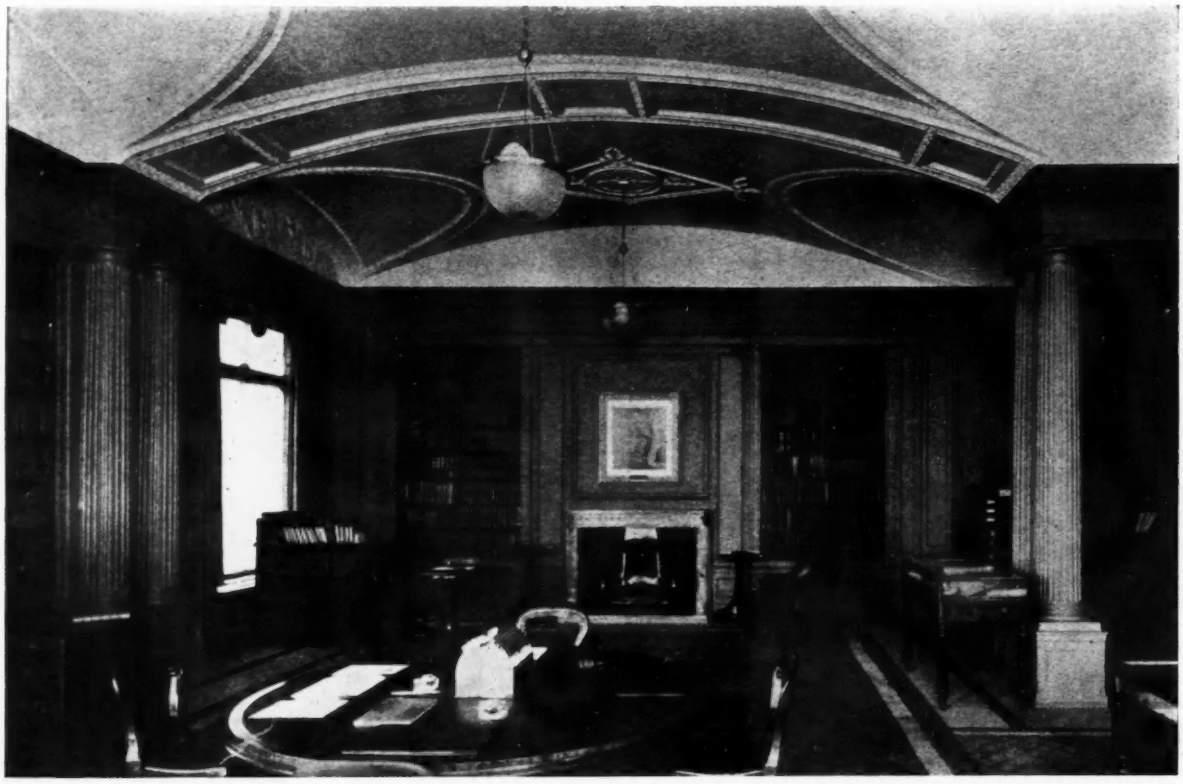
Liverpool Athenæum.]

Plan of the second floor. In addition to the library and the stack-room, which is provided with a gallery to render easily accessible the volumes that are classified on a decimal system, is a librarian's room, conveniently situated between the two. On the same landing is the committee-room, and again a small mezzanine floor provides additional accommodation for the staff.



[*By Willink and Dod.*

Plan of the third floor. Here is the domain of bodily sustenance rather than of mental pabulum. A dining-room measuring 48×26 ft., and a smoking lounge, 26 ft. square, are served by an ample kitchen ; all are top lit, and, from their position at the top of the building, susceptible of easy ventilation. In the lavatory quarters on this floor, dressing-rooms are included.



A corner in the library, looking towards the fireplace. The ceiling is slightly vaulted, and the book-racks are recessed in the wood panelling lining the walls. The entire library has been re-classified on the Dewey decimal system to simplify the finding of any wanted book.



Liverpool Athenæum.] [*By Willink and Dod.*

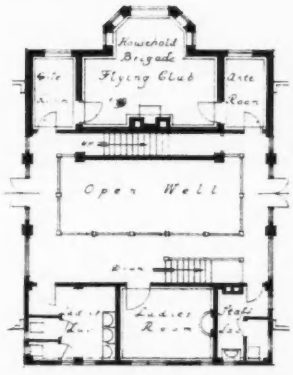
The news-room is the largest in the new building, and as such carries on the tradition of what has always been one of the institution's most useful functions—to supply a meeting-place for friendly discussion of matters concerning the city's development.



AIR PARK AT HESTON

DESIGNED BY

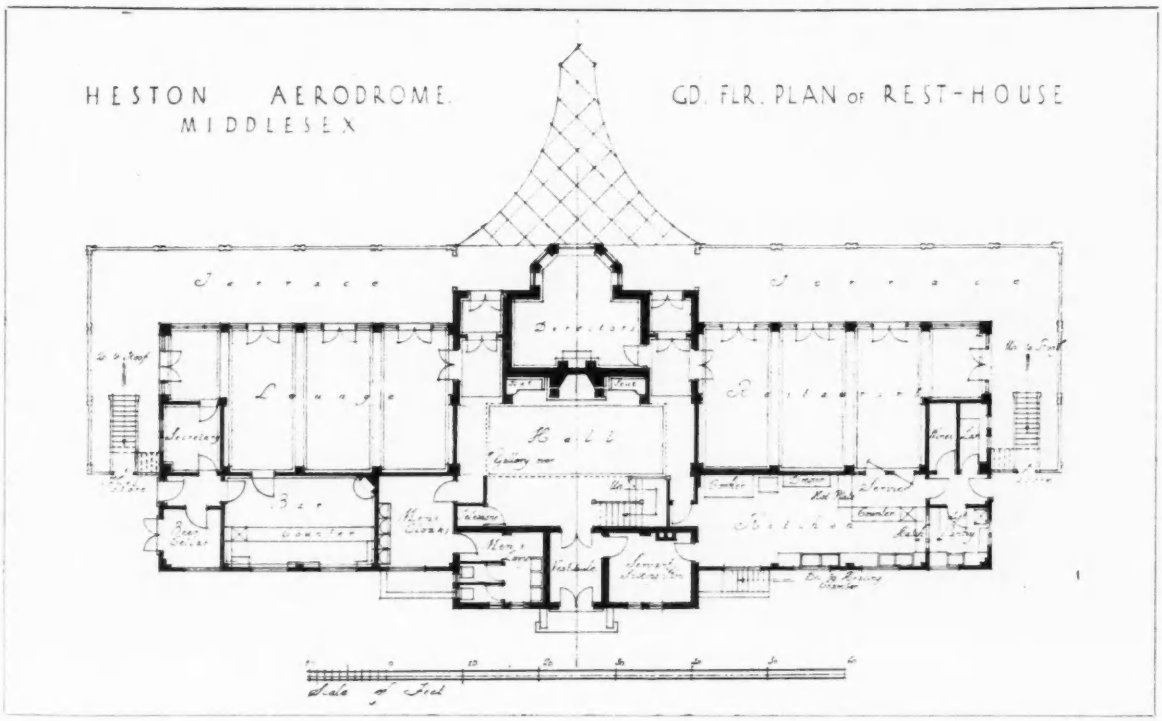
L. MAGNUS AUSTIN



THE site of the Heston Air Park is a level stretch of land, situated on high ground just north of the junction of the Great West Road and Bath Road, between Heston and Cranford, and adjoining the south side of the Grand Junction Canal, south of Southall. It is about 180 acres in extent, of which about 100 acres are now in use as a landing ground.

Owing to the distance from the nearest sewers a small sewage disposal plant was installed, otherwise the local services of gas, water, and electricity were extended and utilized. It is intended that the north and east sides of the site be ultimately used for factory purposes in connection with the construction of aircraft.

The buildings at present erected are grouped about the entrance drive, which is about 500 ft. long and



A view of the rest-house from the flying ground, and the ground- and first-floor plans. The flat roofs have been formed into terraces from which the flying can be viewed. On the first floor are three rooms belonging to the Household Brigade Flying Club.

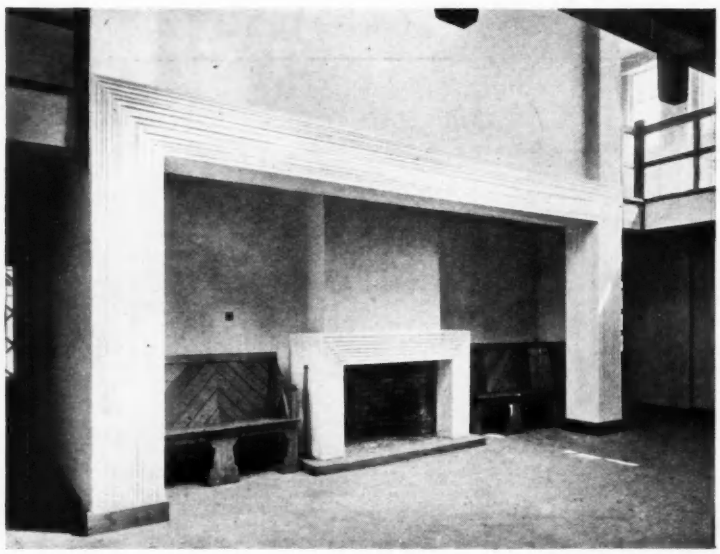


The restaurant (shown above) and the lounge overlook the flying ground. They are both situated on the ground floor and are provided with large flat terraced roofs, from which flying can be viewed. The exterior of the restaurant is seen on the left-hand side of the general view on page 199, and the lounge on the right.

150 ft. wide, leading from Cranford Lane on the south side of the air park. They are related to each other in an economical manner and are planned so as to present a striking appearance from the air, forming a landmark easily picked out from afar. The group takes the form of an arrow, or an aeroplane (caused by the shape of the boundaries of the site), with the central approach road of concrete, 16 ft. wide, pointing to magnetic north. The layout of the approach and square in front of the club-house with gardens will be designed to accentuate this shape. The road

[*Continued on page 204.*





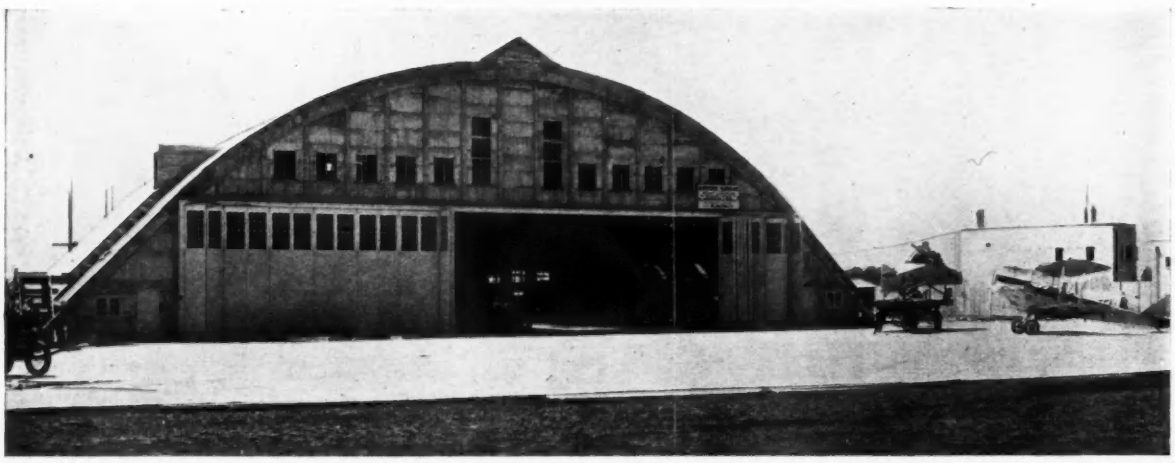
Heston Air Park.] [*By L. Magnus Austin.*

These two photographs of the fireplace and the counter in the bar, and of the fireplace in the hall, show how even the smallest details of the scheme have been imbued with a modern feeling. The hall extends two stories in height and has a gallery which gives access to the roof terraces over the restaurant and lounge.

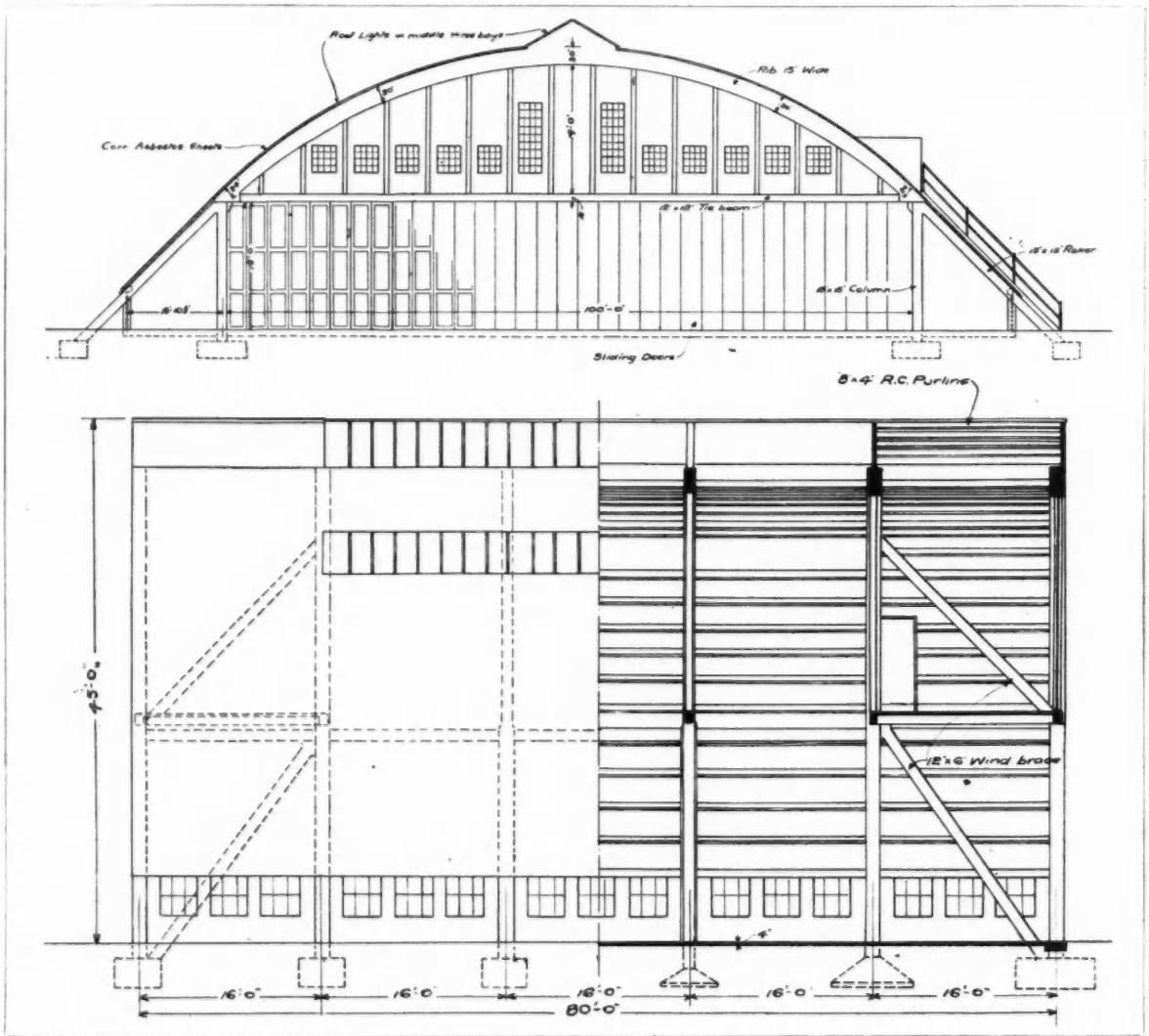


Heston Air Park.] [*By L. Magnus Austin.*

An air view, showing the lock-up hangar, the main hangar, the rest-house, the depot hangars, and the cottages for the staff. The site is about 180 acres in extent, of which about 100 acres are used as a landing ground. The architect's layout plan of the complete scheme appears on page 204. A portion of the site will ultimately be used for factory purposes in connection with the construction of aircraft.

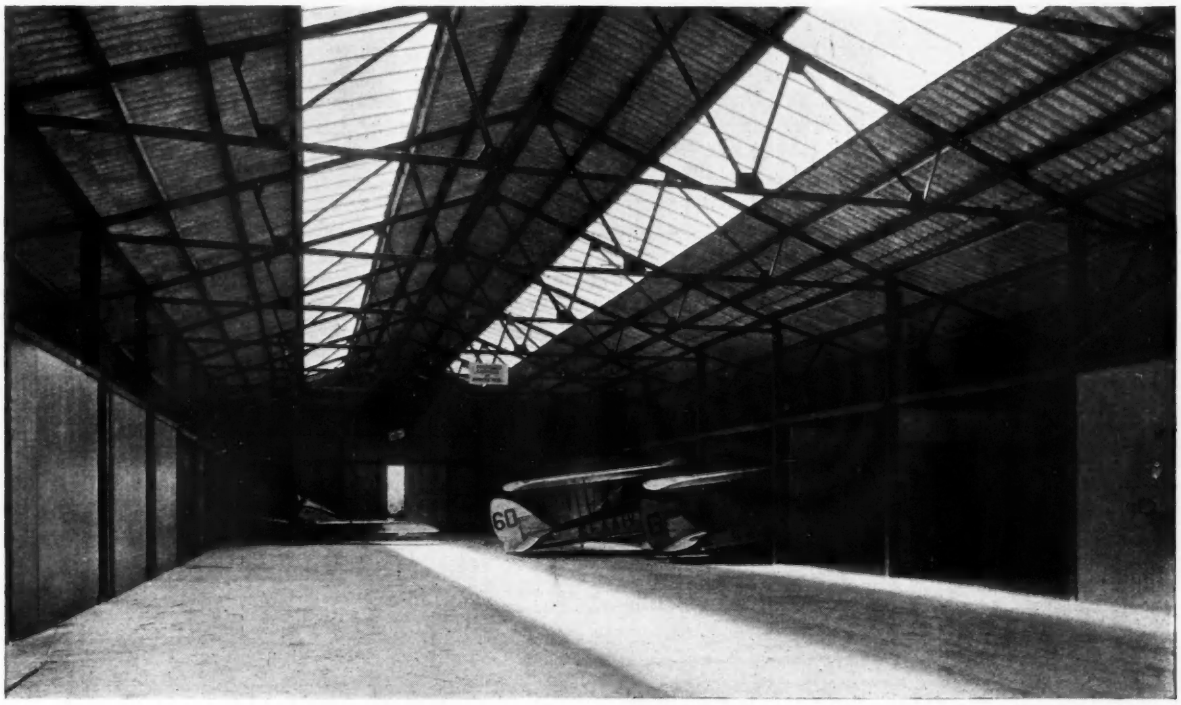


Only one of the main hangars has as yet been built. The opening of the aerodrome front is closed in by folding doors of timber, worked by a geared wheel and steel rope apparatus. These doors are easily operated by one man.

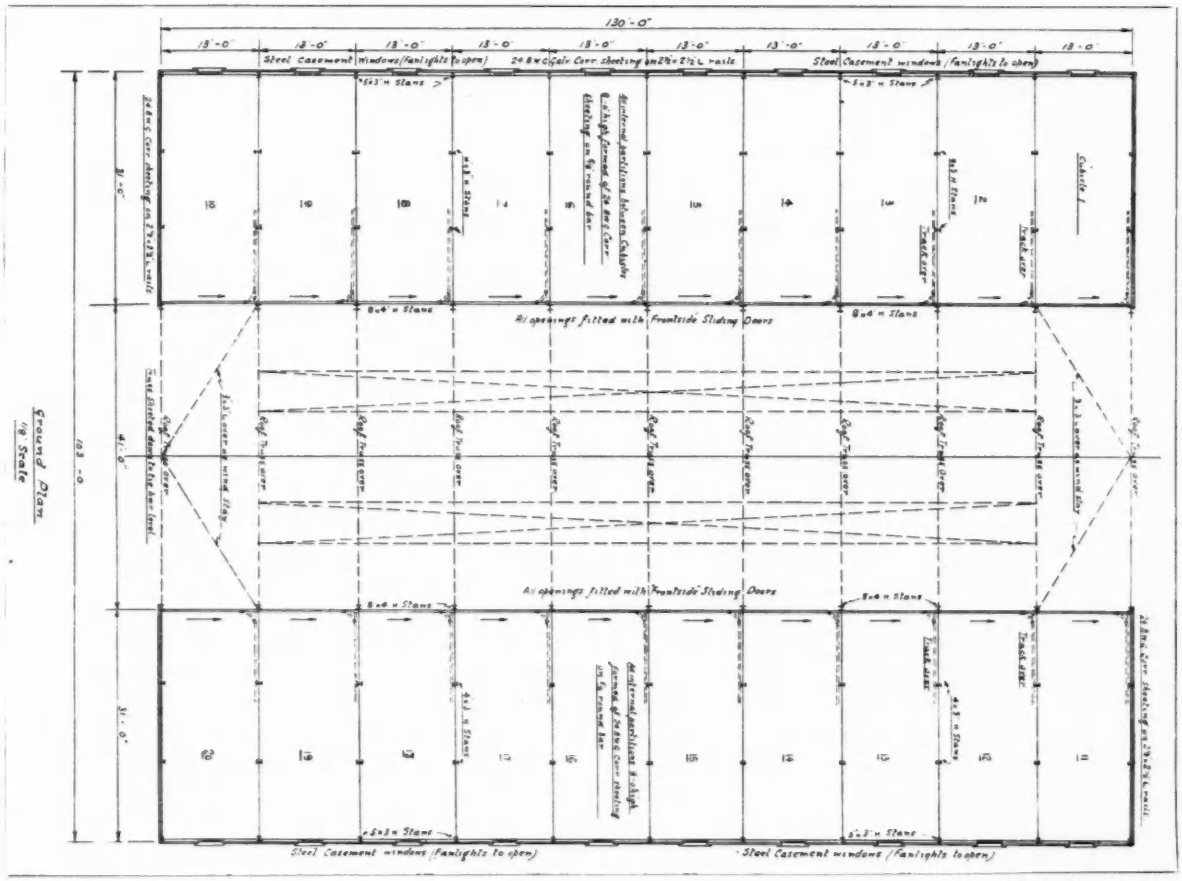


Heston Air Park : the main hangar.] [*By L. Magnus Austin in collaboration with H. F. Murrell.*

Front elevation and cross section of the main hangar, of reinforced concrete, which has a floor area of 100 ft. by 80 ft. The roof, 100 ft. clear span, consists of reinforced concrete bow-arched ribs with pre-cast reinforced concrete purlins.



The lock-up hangar provides individual garages for twenty aeroplanes of the Moth, Avro, Avian, or Bluebird type. Each garage has a sliding door which can be shut and locked. The plan below shows their disposition.



Heston Air Park.] [*By L. Magnus Austin.*

The garages in the lock-up hangar are arranged in two rows with a covered space, 40 ft. wide, between them. The wings of the Moth, and other light aeroplanes, are constructed to fold, and they are easily wheeled about by one man.

divides into two quadrants, taking heavy traffic to the fronts of the hangars, and leaving the central portion between them laid out as a square and a private car-park for the use of the members of the club or rest-house.

The hangars forming the east wing of the scheme are one 100 ft. by 80 ft. clear span concrete hangar for general purposes and four garage or lock-up hangars for the private owner, only one of which has yet been built. The hangars forming the west wing are a general purposes hangar 100 ft. by 80 ft. as before, and a series of depot hangars, three of which have been built.

The rest-house is placed at the head of the arrow, and from it views can be seen down the fronts of the hangars on both sides. The accommodation on the ground and first floors of the rest-house is shown in the plans on page 199. Above this is the director's private room on the north front and another roof terrace over the central hall. Above the director's room on the fourth floor is the control tower, from which uninterrupted views can be obtained in all directions over the flying ground.

On the south side of the rest-house, facing the square, are two cottages for the staff, the eastern of which is planned to be extended to include a staff mess room, with cloakrooms and lavatories attached. Attached to the west cottage will be additional sleeping accommodation, with bath-rooms and lavatories, and an ambulance and first-aid station. All these buildings have flat roofs from which the flying can be viewed.

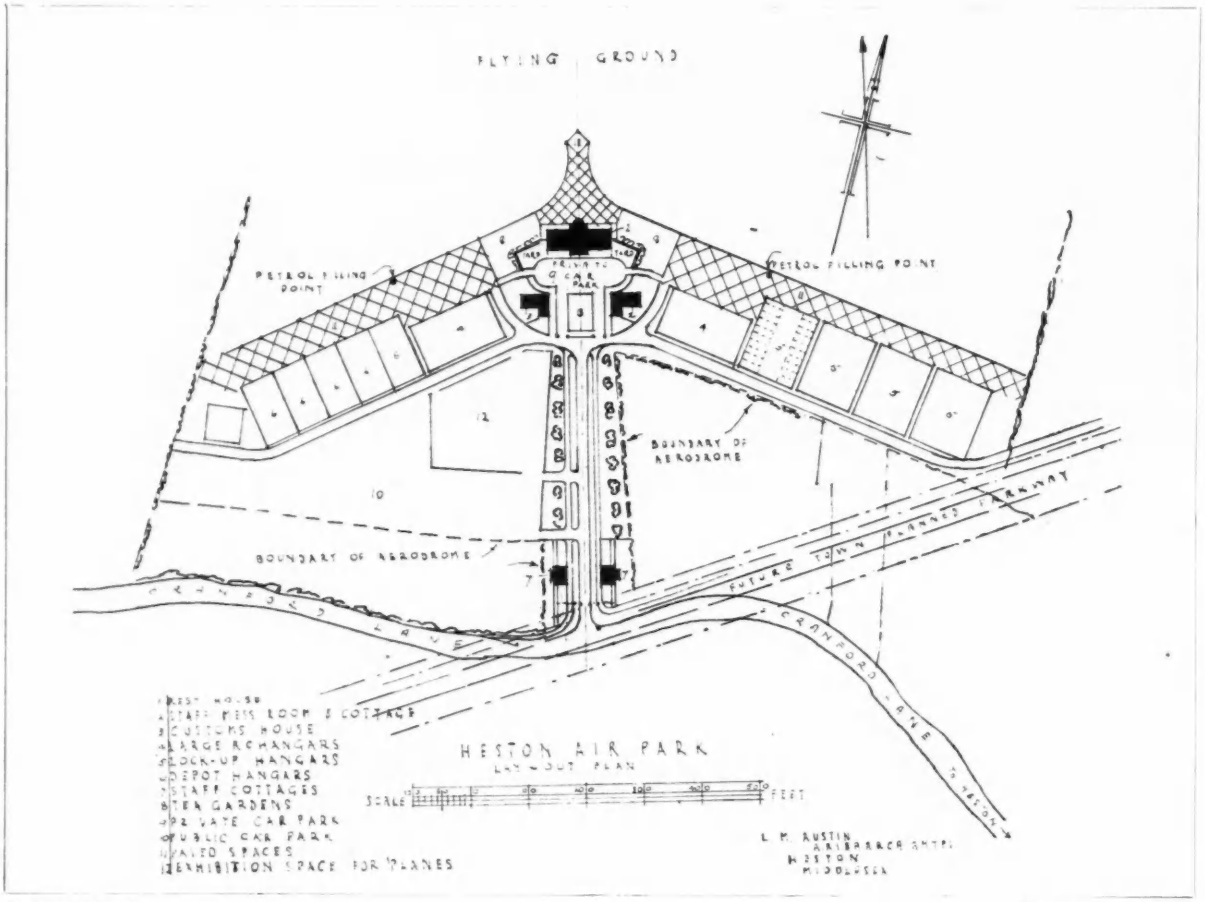
The covered spaces outside the 100 ft. by 80 ft. clear floor space under the rakers are utilized as repair and over-haul shops and store rooms.

In the main hangar office accommodation for the operating company is provided by flooring over the spans adjoining the flying ground front and the road front, respectively, forming two suites of offices, joined by a gallery between, and approached by separate external staircases.

The depot hangars are occupied by the agents of the makers of different types of machines, and are used as showrooms, the road fronts being mainly glass, i.e. shop windows, and are used to house demonstration and show machines to be tested out on the flying ground. These hangars are constructed so as to be extended easily as required.

The land on either side of the central approach road and in the square in front of the club-house will be laid out as gardens, arranged to increase the arrow shape as seen from the air.

The layout plan and the rest-house, staff cottages, and the hangars were designed by Mr. L. Magnus Austin, A.R.I.B.A., A.M.T.P.I. The architects for the big concrete hangar were Mr. Austin in collaboration with Mr. H. F. Murrell, F.R.I.B.A.



Heston Air Park.] [*By L. Magnus Austin.*

The layout plan of the complete scheme. The buildings at present erected are shown in the air view on page 201. They present a striking appearance from the air, and ultimately, owing to the shape of the boundaries of the site, will take an aeroplane shape.



ENGLISH PRECEDENT No. 76

ENTRANCE TO LEICESTER HOSPITAL, WARWICK.

In these days of sham building the fine upstanding structures of the past point a moral. Architects have every cause to be grateful for the preservation of what might be termed museum specimens. From the fragment of old Warwick can be deduced the aspect of most towns of Tudor England. Even the cobbles and the brick paving belong to antiquity. It should not be forgotten that the art of preservation and repair forms part of an architect's duty.

—[A. E. RICHARDSON.]

DAMP IN HOUSES:

From the Soil; From Penetration; From New Walls and Plaster

Damp is a perennial burden in every architect's pack of cares. In two articles, of which the first is published below, "Delta" deals comprehensively with it, detailing the various causes of damp in houses, and suggesting appropriate precautions and remedies.

The sub-committee of the R.I.B.A. have now reported on the causes of and prevention of damp in buildings.

The report is mainly an indictment of the "jerrybuilder." It states that in the case of damp recorded in fifty-three new houses, that is, houses built within the last ten years, about 60 per cent. can be taken as of faulty construction in what can be described as elementary essentials, as follows: 1: 26·6 per cent. in the absence or insufficiency of dampcourses, horizontal or vertical; 2: 14·4 per cent. in the absence of or insufficiency in the covering of the ground over the internal area of the dwelling or ground immediately adjoining the dwelling; 3: 18·3 per cent. to defects mainly due to lack of maintenance, but including some cases of faulty roof construction.

The report deals, I take it, primarily with the small houses which disfigure the landscape, and is addressed in the main to local authorities with the recommendation that they should tighten up by-laws and supervision.

It deals with no specific cases, and under each heading there are alternatives, such as "absence of, insufficiency of, or defects in, dampcourses, whether horizontal or vertical." Now, that tells us very little; we should like to know in how many cases the dampcourse was criminally omitted, in how many the material was ill-chosen, and what were the defects found.

However, to architects, the elementary points are, I hope, of little interest. Specific causes and results would be useful, it is true, but it is the rather more intricate causes of damp that they want to discuss.

In the matter of dampcourses their attention might be drawn, I think, to the modern tendency to have dampcourses about 6 in. above the ground. This frequently causes trouble; I have often seen damp walls caused by flowerbeds being banked up against the house above the dampcourse.

Solid concrete floors on a clay soil are also a source of risk. Save when the house is right on the top of all slopes, there is a liability for damp to penetrate from below, unless the concrete is damp-proofed or has a hard core bed under it. Damp collects in clay in patches, and sometimes on slopes it appears almost as if there were springs in the ground. If a house is built on a slope on clay soil, water is bound to be collecting somewhere under the concrete.

Then there is damp arising from general penetration or from penetration through crevices or joints; temporary damp coming from new walls and new plaster; and, lastly, damp due to condensation. It is frequently difficult to decide which is the root cause in each particular case.

Taking general penetration first, the report gives a percentage of 32·8 new houses in which "damp being recorded, porosity or the capacity of the materials forming the walls to absorb moisture, or the construction of the walls" were found to be the causes. Here again the report is a little vague, though it does go on to uphold the hollow wall as being superior to solid brick, masonry or solid concrete. There is a good deal of difference in the qualities obtainable in each of them; moreover, the thickness is not stated. I think we may assume in the class of property they are dealing with that 9-in. brick walls are referred to.

Bricks are nowadays used so soon after making that they remain very porous until, after a year or two, they have grown, like stone, a callous face. A 9-in. wall, therefore, even if good bricks are used, will not usually keep out weather except in very sheltered places. Hence the great popularity of the hollow wall, which, if built of two half-brick skins, is little more expensive than the 9-in. wall, and is nearly as strong. But the hollow wall has pitfalls of its own. If there is a bad bricklayer on the job he will get the ties covered with cement droppings and water will find its way along these to the inner skin.

Again, it is usual to fill up the cavity at the sides of window openings with slates or tiles in cement, but if iron windows are fixed on the outer skin damp will sometimes show on the reveals between the inside of the frame and the cavity. A piece of slate should be bedded on the face of this reveal to stop this.

The treatment of dampcourses and of gutters over the heads of openings is too well known to be worth mentioning. But there is very real trouble if stone dressings or any similar complication provides a bond from outer to inner skin, for then it would seem that all the damp in the outer skin dashes along to this one place and soaks through to the inner skin.

On the subject of penetration through crevices, the most important thing is to remember that if there must be joints between different materials they should be protected; sills or any other projections should have drips on the underside and good slopes on top. Water is held on surfaces by wind, unless there is a really good slope, and will be driven through any joints available, especially if wood to stone or brick. However well the joint is pointed, there is bound to be movement in the wood and the joint will soon open. Water bars will help this, of course, but the water sometimes soaks under the water bar and so through.

Next there is the case of temporary damp from new wall and plaster. This is a problem where all the different circumstances must be taken separately.

With new plaster on old walls there should be very little trouble. There is not much water in the plaster itself and what there is can be dried out in favourable weather in a few days, or, if the plaster is finished in Keene's, the usual following coat of "sharp paint" will prevent the damp coming out on the inner surface, and will force it to be absorbed into the brickwork, and to be gradually dried outwards.

Now take the case of new walls and new plaster. If the usual modern speed has been attained in the building the walls are saturated and the plaster is also wet. That moisture has got to get to some surface before it can be evaporated. My experience is that a good deal depends upon the weather. Given a decent chance by sun or drying winds the walls will dry outwards, and the Keene finish and following coat will be a successful preliminary to a painted surface; but if the outside walls are finished in cement stucco, the walls cannot dry outwards and it is useless to paint internally until the walls have dried inwards.

There are other variations of the same conclusion: a new internal wall finished in Keene's both sides and painted will frequently show water bubbles and the paint will be destroyed. The damp inside must find some outlet and whatever expedient is used to keep back the damp from some particular surface it is useless if there is no alternative exit for that damp.

"DELTA"

(To be concluded)

ADDITIONS TO A SURREY CHILDREN'S HOSPITAL

DESIGNED BY WALKER AND HARWOOD



The children's hospital at Pyrford has been built for the Church of England Waifs and Strays' Society for the treatment of orthopædic cases. In the open-air wards, one of which is illustrated, children are housed at night and during inclement weather. At all other times patients enjoy direct sunlight in the large space on the open south side.

The Pyrford Orthopædic Hospital, Pyrford, Surrey, of the Church of England Waifs and Strays' Society accommodates about one hundred and eighty patients and a residential staff of sixty-eight in two main blocks. Each block consists of two open-air wards.

The two main blocks contain nurses' quarters and the central administration, and to the larger of the two has now been added a thoroughly up-to-date and well-equipped operating theatre unit. This was made possible through the generosity of Sir Nevill and Lady Beatrix Wilkinson. Lady Beatrix Wilkinson is president of the Children's Union, and Sir Nevill the author and designer of Titania's Palace, which is now on exhibition in this country after a tour in the United States of America, during which some £25,000 was raised for children's work.

The operating theatre unit is somewhat unusual from the fact that it had to be planned as an addition to the existing work; thus questions of light, air, and approach had to be carefully studied. Moreover, a certain sequence of rooms and approach to each was laid down and has been met by the arrangement shown.

The whole unit is one story high, the central portion being covered with a flat asphalt roof, thereby giving as much light and air as possible to the central open area and existing large ward. Direct and easy access is given from the main building to the anæsthetic-room, from this to the operating theatre, and thence by the second pair of doors to the recovery ward.

The operating theatre, wash-up, and sterilizing-room are so planned that the shortest possible direct access is obtained from one to another without doors, and the objection of steam from the sterilizers entering the theatre is largely obviated by arching the opening from the theatre well below the ceiling.

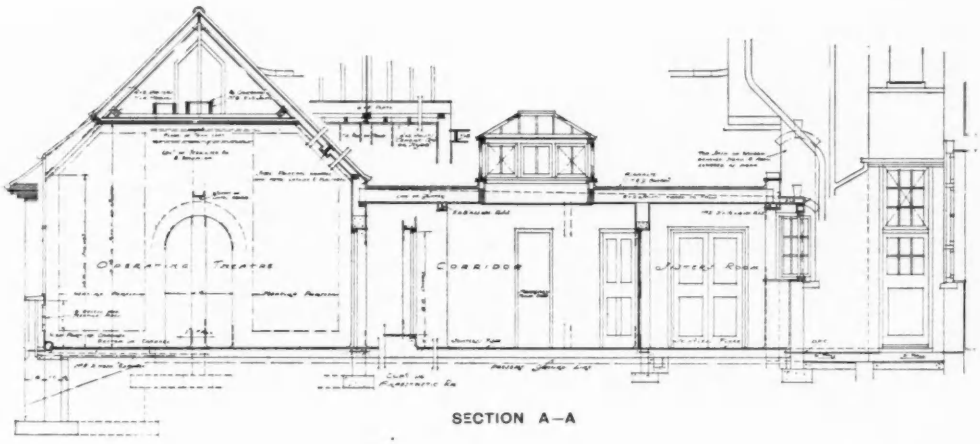
The theatre is exceptionally large, space being provided for two tables if required, each with a large north light extending to ceiling level. Every part of the structure of this end of the unit is made as easily cleanable as possible, with flush mahogany hospital doors, flush windows, rounded angles throughout, and the minimum in the way of

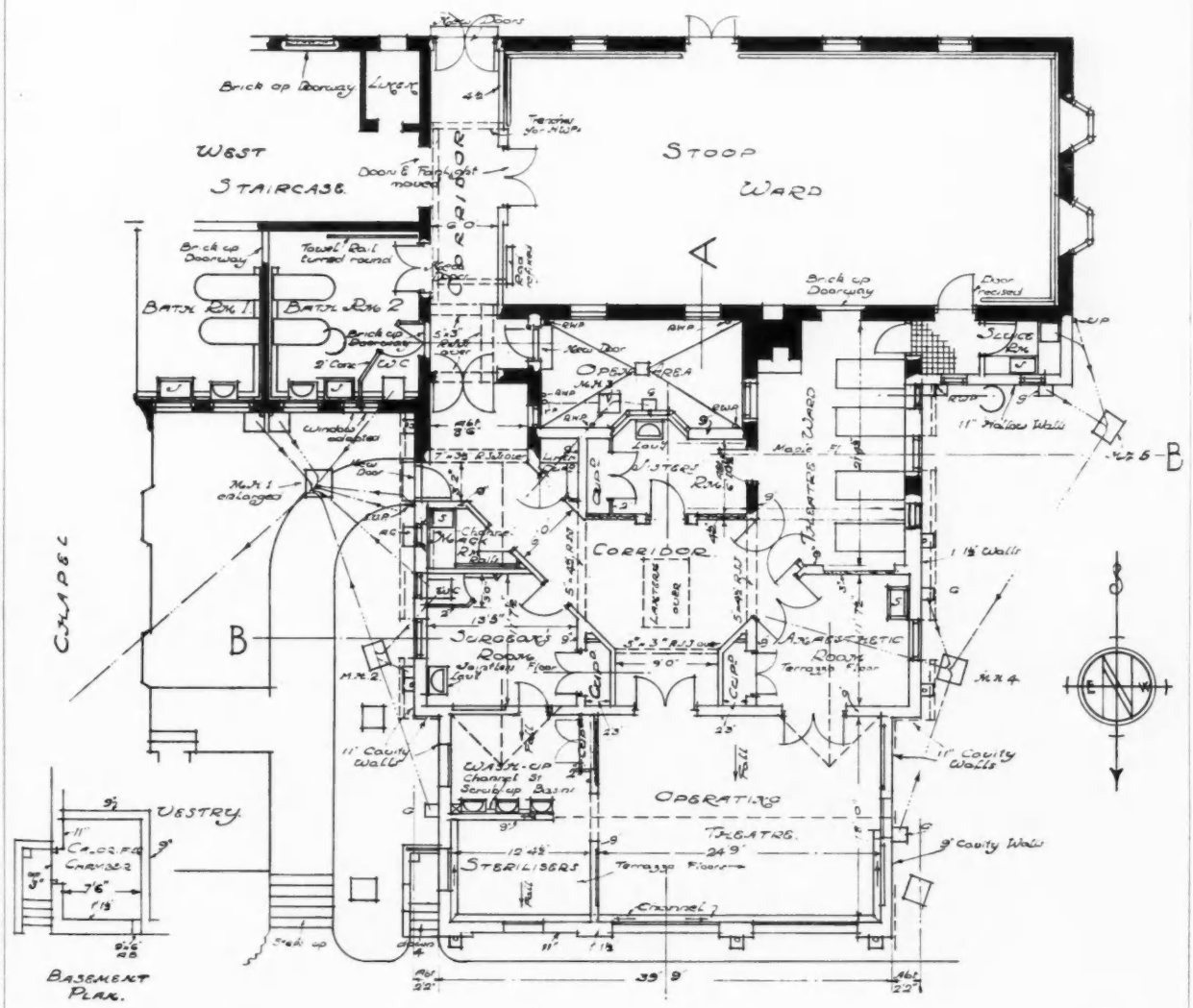
[*Continued on page 210.*





The operating theatre, and covered way to an open-air ward. The privacy of the site has made possible the provision of opening casements in the theatre for use after operations.

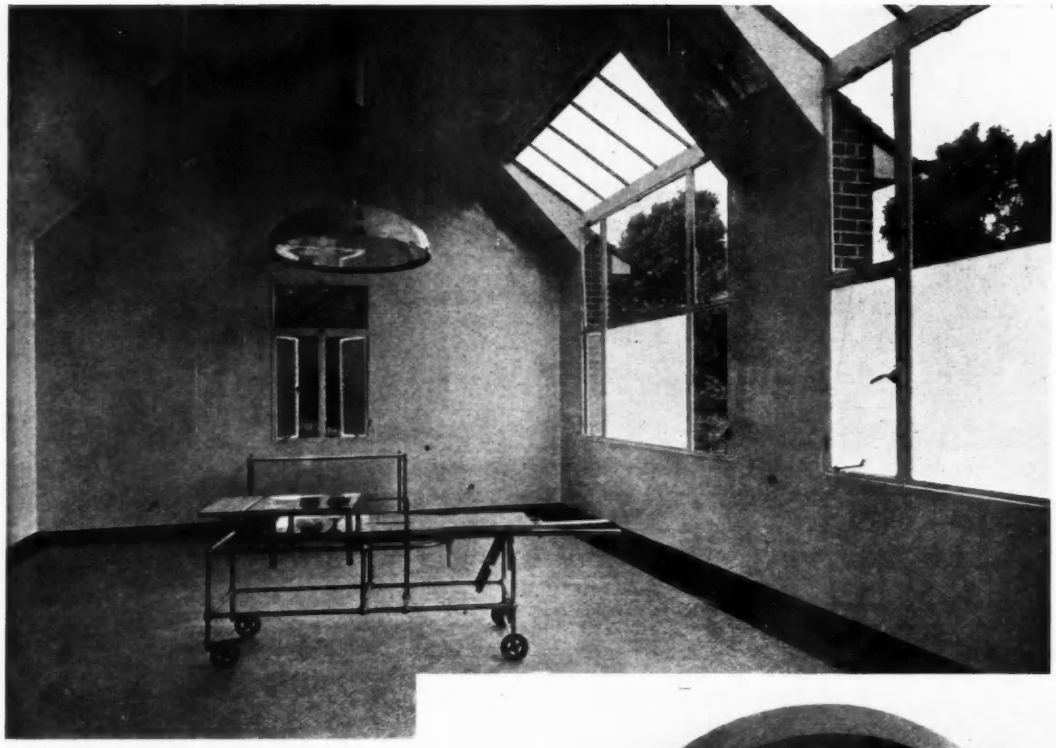




Pyrford Orthopædic Hospital.] [*By Walker and Harwood.*

Plan and section of operating theatre unit. The hospital accommodates about 180 patients and a residential staff of sixty-eight in two main blocks. Each block consists of two open-air wards. The two main blocks contain nurses' quarters and the central administration. To the larger of the two has now been added, through the generosity of Sir Nevill and Lady Beatrix Wilkinson, the operating theatre unit.

Pyrford Orthopædic Hospital.]



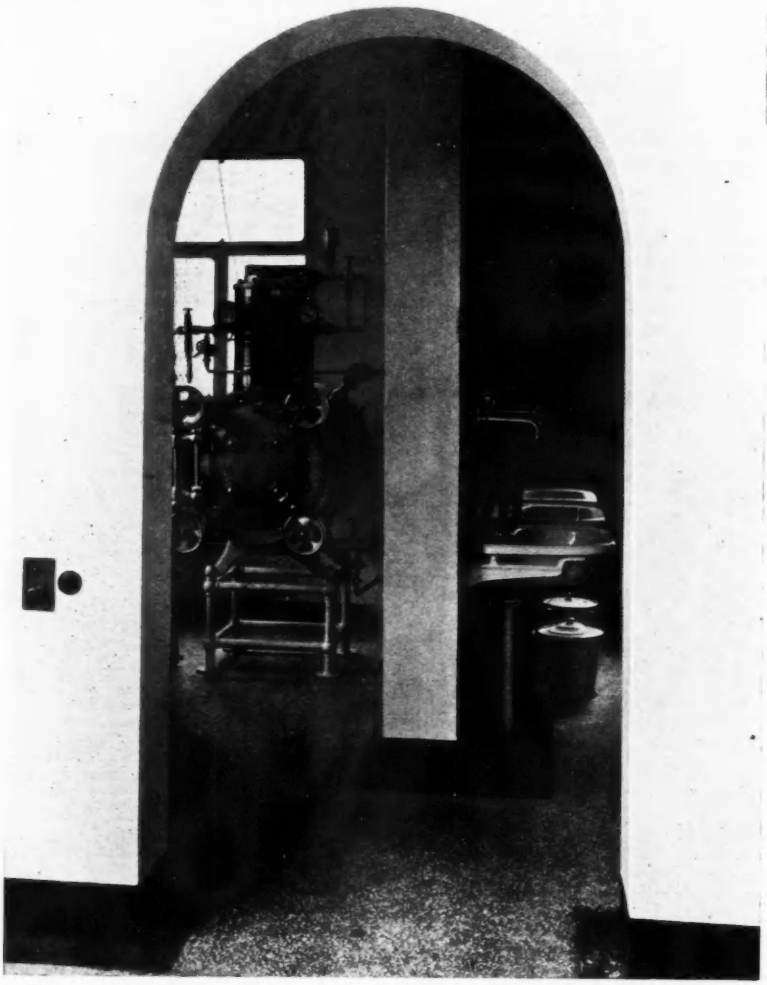
[*By Walker and Harwood.*

In the operating theatre, space is provided for two tables, if required, each with a north light extending to roof level.

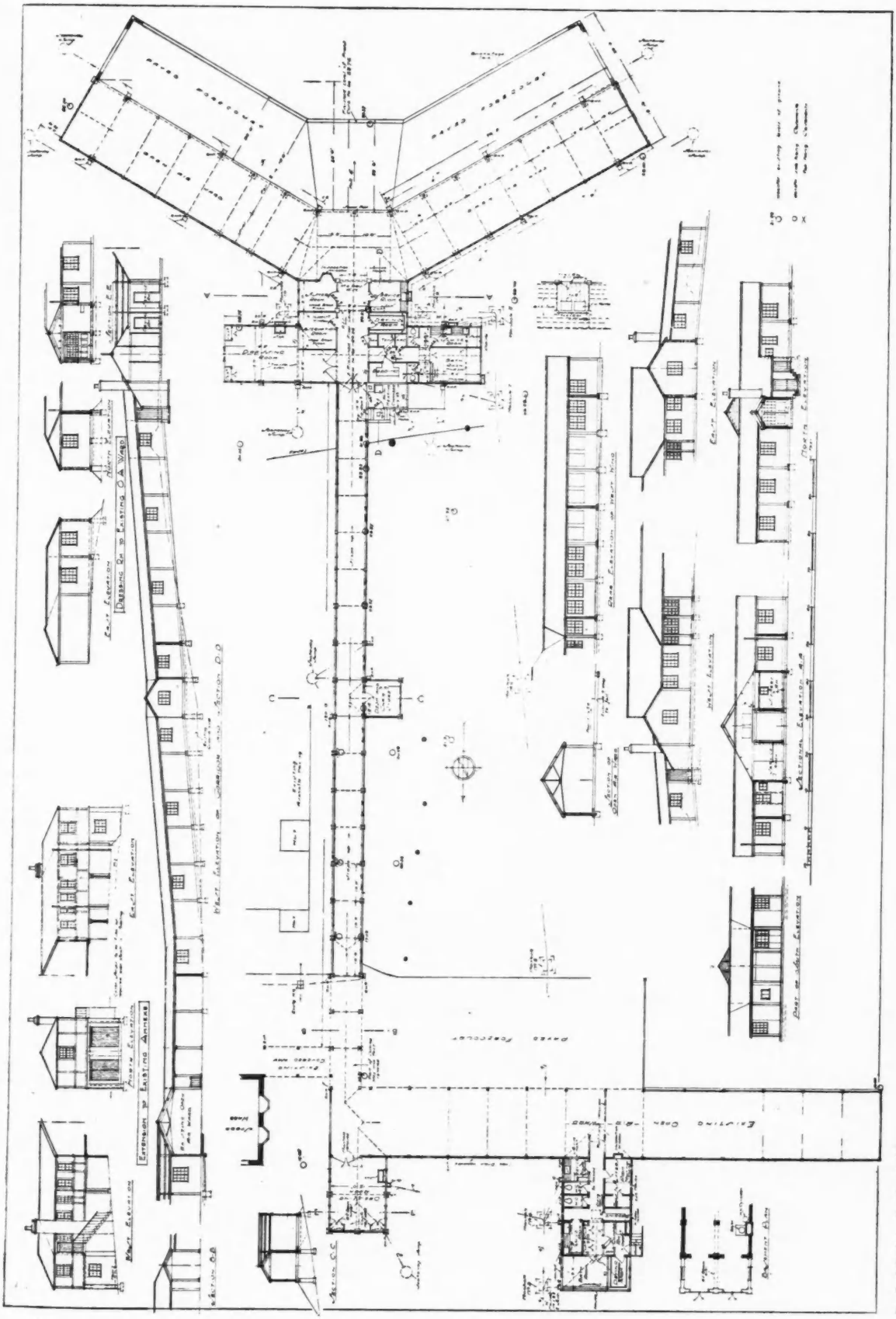
fittings and furniture in the theatre itself, with nothing attached to the walls. A stand-pipe from the main, with hose connection, is provided in the wash-up, and, by means of a hose from this, ceiling, walls, and floor of the theatre can be kept as clean as it is possible to get them. The floors of the theatre, sterilizing-room and wash-up, and anæsthetic-room are carried out in black and white terrazzo, with black borders and skirtings, and the remaining new floors in jointless composition. Electric lighting is provided throughout. The theatre has a large scialytic adjustable lamp, and in addition there are four sunk waterproof lights in the ceiling. Heating is on the panel system.

Advantage has been taken of the rural amenities of the site to provide opening casements in the theatre. These are placed on either side of the large north lights and at one end of the theatre for use after operations. In addition an electrically driven extract fan, with gratings of appropriate areas, is installed in the ceilings of the theatre, sterilizing-room and wash-up. By this means the steam from the sterilizers can be removed.

The decoration is probably unique in this country. The anæsthetic-room and recovery ward have hand-painted friezes extending around the walls and depicting such scenes and figures as children love, including the fairy, Titania—the creation of the donors.

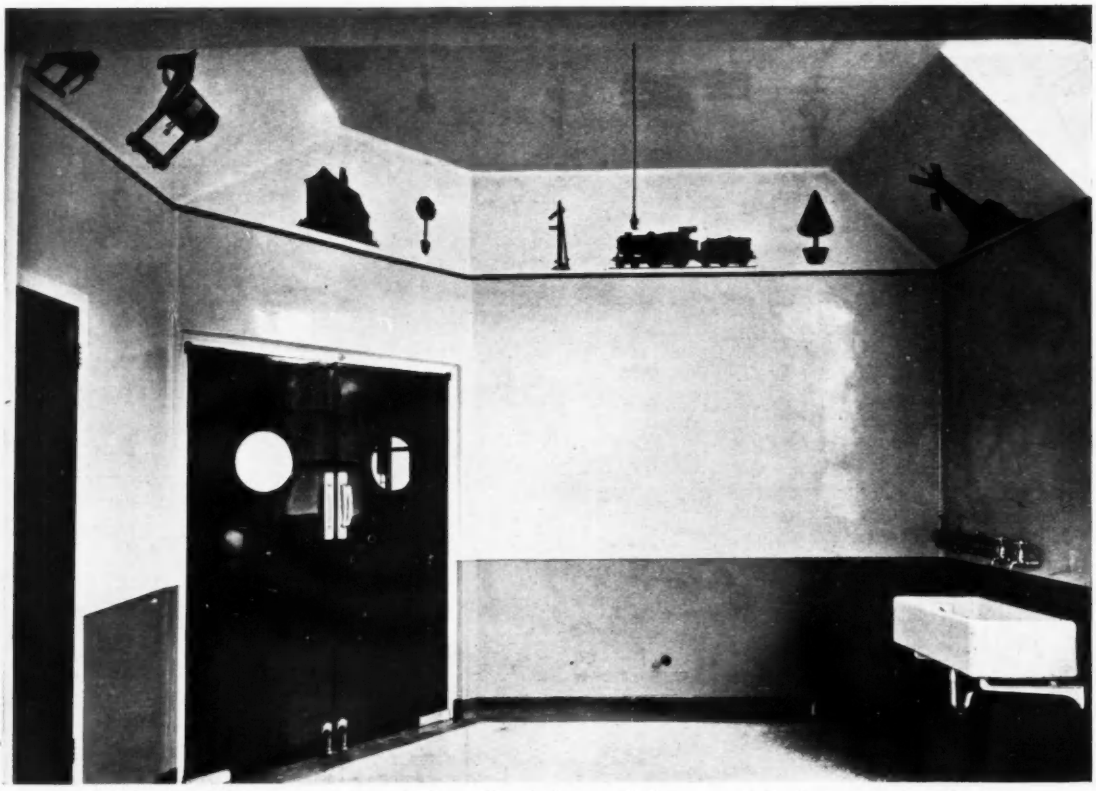


The operating theatre, wash-up and sterilizing-room are planned without doors. Steam is prevented from entering the theatre by the low arch above the opening.



Plan and elevations of an open-air ward. Each ward is planned as a sun-trap, and is provided with the necessary administration offices.

Pyrford Orthopædic Hospital. [*By Walker and Harwood.*



Hand-painted friezes extend around the walls of the anæsthetic-room. The figures are in silhouette on a plain background, blobs of colour emphasizing the important features.



Pyrford Orthopædic Hospital.] *[By Walker and Harwood.*

The hand-painted frieze in the recovery ward is in colour with the figures, etc., boldly treated. The walls below the friezes are enamelled in harmonious shades of primrose yellow, with a green dado in the ward.

LITERATURE

BUILDING CRAFTSMANSHIP

A book from the pen and camera of Mr. Nathaniel Lloyd must be welcomed by everyone who is interested in the art of building. He is already well known for that fine study of his on English brickwork, wherein he dealt so faithfully with the history and styles of brickbuilding.

In the new book, *Building Craftsmanship in Brick and Tile and in Stone Slates*, he is not dealing historically with the subject, but reveals and sets forth by pen and excellent photographs those qualities of material and niceties of construction used by the builders of old time; methods that contributed to the rightness of their building and that gave charm to the use of their everyday material. He deals with little things that, if done in one way, make a building tame or even commonplace and vulgar, while, if done in just the right way, give that subtle quality that puts us all in love with the old cottages and houses up and down the country.

Mr. Lloyd brings to this book those gifts of observation and insight that make his books so valuable. He has not only the eye of the artist to see what is pleasing, but he has the technical knowledge to dissect exactly how an effect is produced, and he has a painstaking mind that no detail escapes. He has the imagination to see just what are the essentials of any piece of construction, and he can explain technical points lucidly. Coupled with this, he is himself a very good photographer and can take pictures of the buildings and points of construction or design that he wishes to be illustrated. These are more apt than any pictures taken by the professional photographer, who would not clearly grasp the details at issue. He includes, too, pictures showing how things should not be done for comparison with those showing the ways of which he approves.

Do we not all know the ideal guidebook that has not yet been written, which should companion the Baedeker: the guide that will tell us architects, in the places we visit, of the little intimate things that are worth our attention, but which cannot be hall-marked or starred as great buildings? The book under review has done just this in the realm of building construction, dealing as it does with those elements in construction which give pleasure to the eye and turn mere building into a thing of artistic delight.

The book deals with brick and stone walling, with tile and stone slated roofs, with dormers, chimneys, and all kinds of uses of brick in fireplaces, paving, steps, and so on; and one of the most useful chapters is on brick bonding and the effects produced by various kinds of bond. A comparison of the houses in, say, a new suburb with the delightful examples that are given of Kent and Sussex cottages and farms, will remind us how far removed as a craftsman the modern-day workman is from his forbears. His training in elementary school, his apprenticeship to contractor or speculative builder, his trade union outlook have all combined to rob him of that almost intuitive knowledge of the happy and right use of his material that was the heritage of the craftsman in less sophisticated times.

Now it is the architect who must design and guide him in every detail if it is to rise above the commonplace.



Dormer window showing tiles laid and nailed to breeze sprockets and valley:—valleys laced.
[*From* Building Craftsmanship.]

Mr. Lloyd would, no doubt, have us get back to all the old methods, and occasionally encourages us to go perilously near to faking work to look like old. Another school would have us recognize that times have changed, that the modern workman is not the same kind of artist craftsman that his grandfather was, and so would have us design to meet machine-made methods and say goodbye to all the older materials.

Probably the truth lies half-way between the two schools; brick and tile and stone still remain good materials for house building. In any case, the power to see and realize the subtleties that go to the right effect in design is the kind of understanding an architect should have, and he should be able to analyse just how the good effect is produced in the building up of his units of material. It is this exposition that makes Mr. Lloyd's book so useful, and there are few of us who will not learn something and have our eyes opened by a study of this work.

OSWALD P. MILNE

Building Craftsmanship in Brick and Tile and in Stone Slates. By Nathaniel Lloyd. Cambridge University Press. Price 15s. net.

THE REPAIR OF ANCIENT BUILDINGS

The Society for the Protection of Ancient Buildings, in its annual report of June 1928, promised to bring up to date its "Notes on Repair." *Repair of Ancient Buildings*, by Mr. A. R. Powys, the Society's secretary, is the fulfilment of the promise. As secretary to the Society for the Protection of Ancient Buildings, Mr. Powys had, for his book, access to exceptional matter and the traditional knowledge which his Society has inherited and gathered from many different sources.

Repair of Ancient Buildings contains much useful information, but on the whole falls short of expectations, and will not, we think, become a standard book of reference.

Mr. Powys, in the preface, is his own judge; the architect will be disappointed and the layman will find that the book is too technical. The repair of ancient buildings has become a science, but it is not necessary or desirable .to enshroud this fascinating branch of the architect's work with mystery or uncertainty. The latter feeling pervades the book and exactness is wanting.

The leaflet, *Limewash as a Stone Preservative*, prepared by Mr. E. E. Lofting, and issued by the committee of the Society for the Protection of Ancient Buildings, is reprinted on pages 96 and 97, but the author then proceeds to inform his technical and lay readers that Mr. Warnes and other chemists dismiss limewash as unscientific or chemically unsound, and says: "I do not doubt their knowledge, but am puzzled to reconcile their opinion with the facts as they may be seen by ordinary men."

Where is the specialist guidance in this and where will the poor layman be when he has to come to a conclusion in the matter?

It is a pity that Mr. Powys did not invite co-operation and insert contributions by Mr. Noel Heaton, the hon. chemical adviser, and Mr. J. S. Wilson, the consulting engineer to the Society for the Protection of Ancient Buildings. They no doubt could have added much precise technical data. The valuable work carried out by the Ancient Monuments Department of His Majesty's Office of Works is barely mentioned.

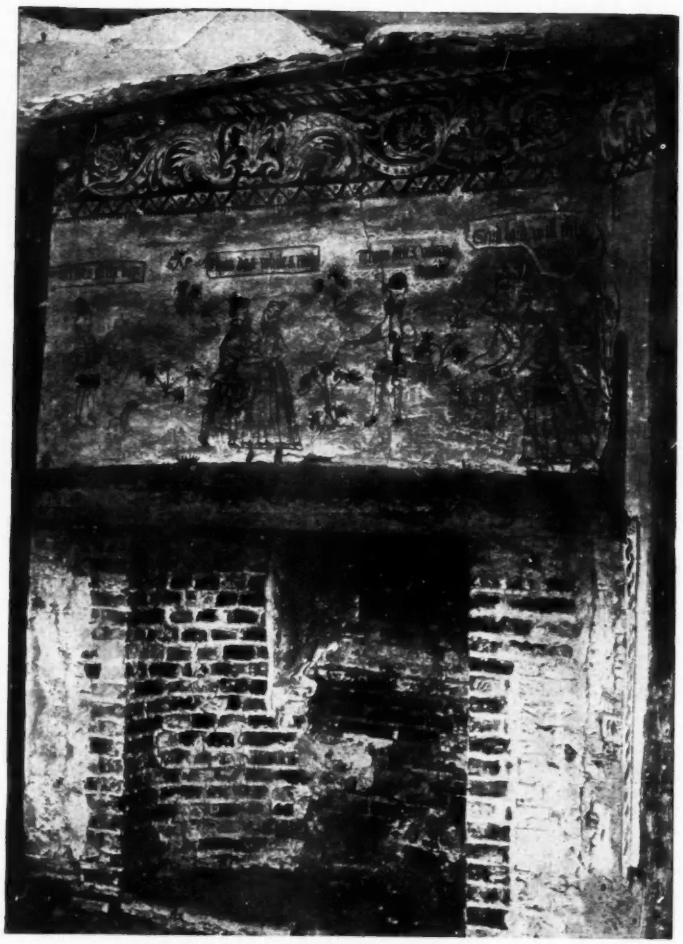
The book is worthy of better illustrations; the photographs do not clearly interpret the points in question, and the drawings have not been carefully edited and are too small. "Oft expectation fails, and most oft there where most it promises." Mr. A. R. Powys had a very difficult and exacting task. He has not altogether failed, and in any case the book will prove most interesting to all architects engaged on works of repair, and *Repair of Ancient Buildings* should find a place in their libraries.

THOMAS FALCONER

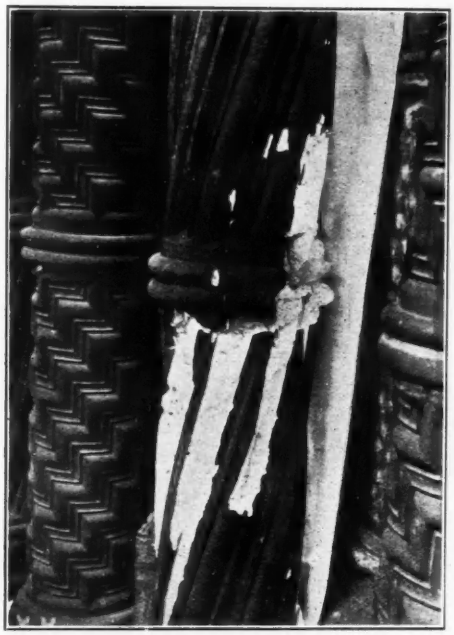
Repair of Ancient Buildings. By A. R. Powys, Secretary of the Society for the Protection of Ancient Buildings. J. M. Dent and Sons, Ltd. Price 7s. 6d. net.

SUBJECT INDEX TO PERIODICALS

The 1927 volume of *The Subject Index to Periodicals*, issued this year by The Library Association, comprises entries of approximately 23,000 articles, selected from about 600 periodicals, chiefly British and American, but including a few Continental periodicals. The headings are arranged alphabetically by subjects, and are chosen from the alphabetical subject headings of the Library of Congress, with modifications and additions to suit British practice. Brief annotations are given when the titles of articles do not



West Stow Hall, Suffolk: A mural painting.
[*From* Repair of Ancient Buildings.]



Column in porch of British Museum (Natural History) ruptured by thermal expansion.

[*From* Investigations into the Durability of Architectural Terra Cotta and Faience.]

sufficiently indicate their contents. Magazine verse and fiction are not included. Under each heading the authors' names now precede, instead of follow, the titles of the articles. This arrangement brings together all the articles by one author on a specific subject and is an aid to quick reference.

This reference work should be of particular value to libraries.

The Subject Index to Periodicals was begun in 1915 to fill an ever-widening gap in the collection of important reference books; Poole's *Index* (American) had ceased publication some years earlier, and no worthy successor had been forthcoming. Without a general index periodicals are almost useless. With such an index a mass of recent material is made available, and often provides information on subjects not represented by separate books.

The general editor is Mr. E. E. G. Tucker, B.A., and the contributors include the chief librarians and their staffs of over fifty libraries in the British Isles, including such prominent individuals as Mr. G. H. Palmer, keeper of the library, Victoria and Albert Museum.

The Subject Index to Periodicals. The Library Association. Price per volume £3 10s., bound in cloth.

THE DURABILITY OF TERRA COTTA

When the Madison Square Building, New York, was demolished in 1924, after thirty-five years' exposure to weather, the terra cotta was found to be in a surprisingly sound condition. Where failure had taken place, this was caused either by the use of unsuitable aggregates, by careless backing or filling with aggregates, or by corrosion of iron clamps, to which moisture had penetrated; indeed, so perfect was the terra cotta that whole details were removed and reused in the Hartford Times building, Hartford, and others were placed in the Metropolitan Museum, New York, and in the museum at Brooklyn.

The recently published report by the Department of Building Research on "Investigations into the Durability of Architectural Terra Cotta and Faience" does not refer to metal cramps or ties, possibly because most of their investigations were of buildings not in course of destruction. The inquiry has thoroughly explored chemical and mechanical causes of decay in terra cotta, with remarkably satisfactory results. Most of the faulty blocks were of the pinkish-buff terra cotta, which is no longer demanded or marketed. Sulphation, the commonest cause of decay of all building materials, was almost entirely confined to terra cotta of this colour, probably because the colour was obtained by under-burning. Naturally, blocks having vertical laminations, into which moisture could penetrate, had weathered ill, but such cases were rare. Investigations included such buildings as the Natural History Museum, South Kensington, 1873; the Victoria and Albert Museum, dating from 1662; the Royal Albert Hall, 1867; and a garden balustrade at Buckingham Palace, 1827.

The report describes the manufacture of terra cotta, examines into the factors governing its durability, describes experimental tests in tensile and compressive strength, with other physical and chemical properties. The whole is briefly summed up in a final chapter followed by a bibliography and appendix of specification tests. The pamphlet is admirably thorough and, above all, lucid. Except that Certosa di Pavia is spelt Cerlosa, both in the text and in the index, the pamphlet seems to have been carefully read. N. L.

Investigations into the Durability of Architectural Terra Cotta and Faience. Department of Scientific and Industrial Research: Building Research. Special Report No. 12. Published by H.M. Stationery Office. Price 2s. 6d. net.

WELSH HOUSING AND DEVELOPMENT YEAR BOOK

The Welsh Housing and Development Year Book for 1929 has reached its fourteenth year of publication. Since the publication of the issue for 1928, the association has continued its efforts to further town and regional planning; to improve the housing conditions in both rural and urban areas, and to safeguard and preserve the amenities of the Principality. A good step forward has been taken by the passing of the Local Government Act (1929) in regard to town and regional planning. The committee of the Association gave close attention to those portions of the measure, and it may be more than a coincidence that the general proposals embodied in the sections were similar to those which had been put forward by the committee from time to time. In the foreword, Mr. T. Alwyn Lloyd, F.R.I.B.A., President of the South Wales Institute of Architects, says: The Association for many years past has done a great work, quite exceptional in the range of its activities, in directing attention to vital social and educational questions; among these are town and regional planning, better housing, rural preservation, and public health, which closely affect every citizen in the Principality. The year book contains over twenty specially contributed articles dealing with such subjects as housing and town planning, rural preservation, folk-lore, and Roman excavations, among the authors being Messrs. G. L. Pepler, T. Alwyn Lloyd, W. S. Purchon, E. A. Charles, Dr. Cyril Fox, and Professor W. Norman Thomas.

The Welsh Housing and Development Year Book, 1929. The Welsh Housing and Development Association, Cardiff. 2s. net.

Architects' Estates

Major Ellis Rawson Birks, of Whitcot, Branscombe, Beer, formerly of Sheffield, architect, aged forty-nine, left estate of the gross value of £18,691, with net personalty, £17,532.

Mr. James Alfred Ernest Lofthouse, A.R.I.B.A., of The Croft, Linthorpe, Middlesbrough, principal of Messrs. R. Lofthouse and Sons, architects, left £5,596; net personalty, £5,503.

LAW REPORTS

TERMINATION OF LEASE DISPUTE

Burton and another v. *Lowestoft Co-operative Society. King's Bench Division. Before Mr. Justice Humphreys*

The case centred around the point whether or not a lease granted by the plaintiffs, Dr. A. H. Burton and Major W. M. Burton, to the defendants, the Lowestoft Co-operative Society, of 7a South Green, Southwold, Suffolk, was still subsisting and binding on the defendants. Plaintiffs sought a declaration that it was; and also sued for £27 10s. arrears of rent, and damages for breach of covenant.

The defendants' reply was that they had determined the lease by proper notice.

Mr. Done, for the plaintiffs, said his clients were the freeholders of the property, and in August 1921 they granted the defendants a fourteen years' lease. The lease contained a proviso which enabled the defendants to give six months' notice at the end of the first seven years to terminate the lease. But a precedent to the operation of that notice was the performance of repairing covenants. The plaintiffs contended that though the notice had been duly given as required, the repairing covenants had not been complied with, and, therefore, despite the notice given by the defendants, the lease was still existing.

Mr. Dabeney said he accepted possession of the premises as it was represented to him that the landlords' solicitors had authorized defendants' manager to give the key to him.

Mr. John W. Stevens, an architect of Godliman Street, E.C., also gave evidence for the plaintiffs.

Mr. Du Parcq, K.C., for the defendants, contended that the notice given was a good notice, and that the lease was duly terminated.

His lordship, in giving judgment, said he had sympathy for the defendants because it was quite clear that they gave a perfectly good notice which was accepted. The defendants were under the impression that the tenancy had expired and the landlords were also of that opinion. It was not until some time after the notice had been given that the defendants were informed by the plaintiffs that it had been discovered that there were breaches of covenant which rendered the notice invalid. Here the plaintiffs had never presumed possession. There was no dispute that there had been breaches of covenant and the plaintiffs were right in saying that the notice was invalid. Plaintiffs were therefore entitled to a declaration that the lease was subsisting and binding on the defendants as lessees, and plaintiffs were entitled to £27 10s. arrears of rent.

REGENT STREET LEASE: CONSTRUCTION OF OPTION

The Piccadilly Hotel, Ltd., v. *Stewart Dawson & Co., Ltd. Chancery Division. Before Mr. Justice Clauson*

This matter came before the Court for its decision on the construction of a clause in a lease granted by the Piccadilly Hotel Co. to Stewart Dawson & Co., silversmiths and jewellers, of 73 to 79 Regent Street, which gave them an option to take a lease of 71 Regent Street on the expiration of the tenancy of the London and North Eastern Railway Co. on September 29 next, "on such premises becoming vacant," at a stipulated rent.

Mr. Alexander Grant, K.C., for the plaintiffs, said the question was one of construction. The lease granted to the defendants was from March 1909 for eighty-four years. At that time nobody anticipated the alteration which had taken place in Regent Street, or that the option given to the defendants would prove so valuable. The London and North Eastern Railway Co. desired to renew their lease of 71 Regent Street next September, and the defendants wanted to exercise their option. Counsel said it would benefit the plaintiffs if that option could not be enforced, as the plaintiffs would then get an enhanced rent. His submission was that the words in the option, "on such premises becoming vacant," meant that while the sitting tenant remained there could be no vacancy, although their tenancy agreement had expired. He agreed that he could not bring in another tenant without giving the defendants an opportunity of exercising their option, but his contention was that so long as the sitting tenant was willing to go on, there could be no vacancy. He therefore asked the Court to construe the words in the plaintiffs' favour for the present.

His lordship said he was of opinion that the plaintiffs were bound to create a vacancy at the termination of the London and North Eastern Railway Co.'s tenancy in September. Otherwise the option given to the defendants would be destroyed. Under these circumstances he made a declaration that the plaintiffs were not entitled to grant the London and North Eastern Railway Co. a new lease without giving the defendants an opportunity of exercising their option.

Mr. Archer, K.C., represented the defendants.

SHADOW-PROJECTION

A Holiday Course for Architectural Students: x

BY JOHN M. HOLMES

Diagrams 20-20a: Shadows on an Arcade

DIAGRAM 20

In this example are shown the working lines for shadows in the interior of the form, the plan being treated as a section in order to demonstrate the shadows on the floor surface, which would not otherwise be seen from above. The projection of the semi-circular edges of the arches on to the inner wall involves the principle shown in diagram P, instalment ii. It is sufficient to project the two centres A and B in plan through the plan line of the back wall to the elevation, to produce centres AC and BC, and to draw the semicircles of shadow of the same radius as the arch. DE is the shadow of the front edge of the arch, EF is the shadow of the portion of the back edge of the arch on which light falls.

The cast shadow of the abacus on to the column in elevation is found by direct projection in plan and elevation, as shown in the large-scale diagram 20a. The part of the dividing line of the abacus which is not shadowed on the column appears on the inner wall surface and is projected through the plan line of the wall surface; thus, points G, H, J, K in diagram 20 have their shadows at GS, HS, JS, KS, respectively. The shadows of the column bases are projected downwards through the elevation line LM.

DIAGRAM 20a

The curved part of the elevation shadow YS—XS will be part of a circle with Z as centre. YS—XS is the shadow of plan line YX (the line made by a plane through the edge YX cutting the cylinder at 45 deg.). When viewed in side elevation such a

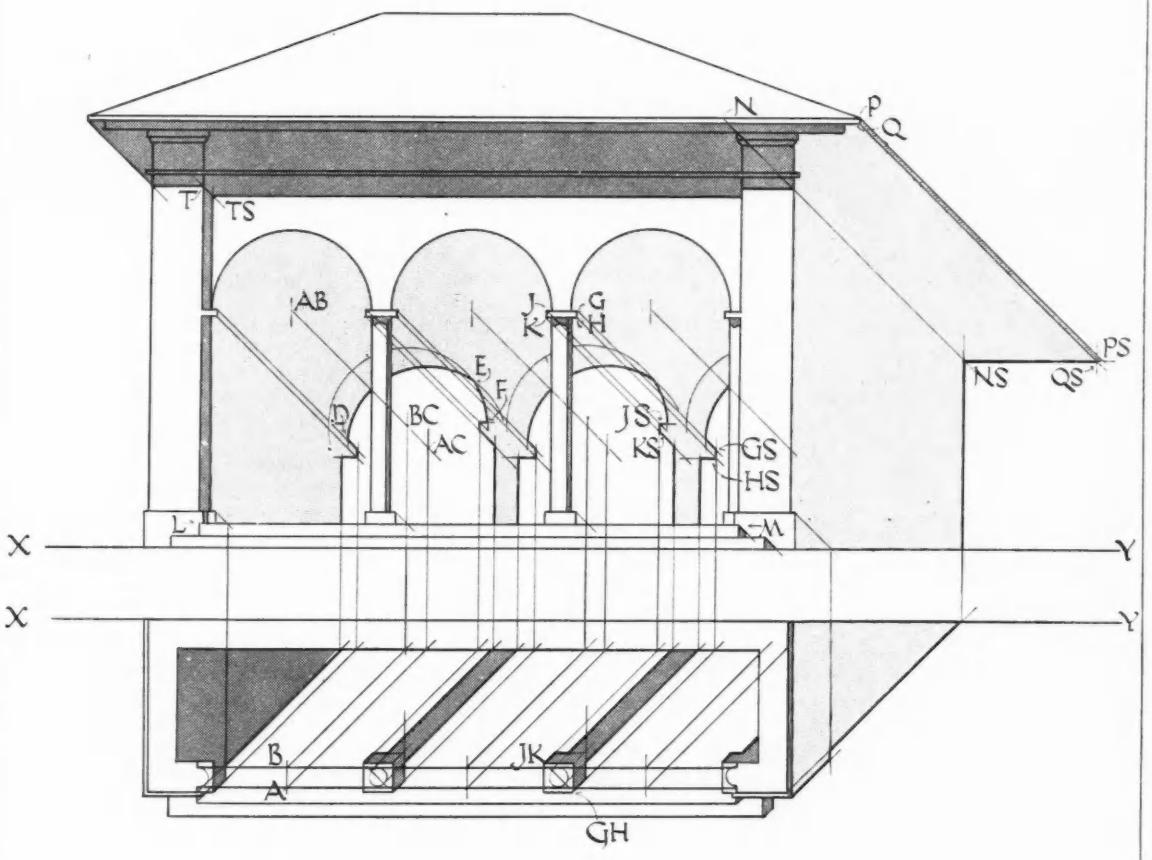


DIAGRAM 20.

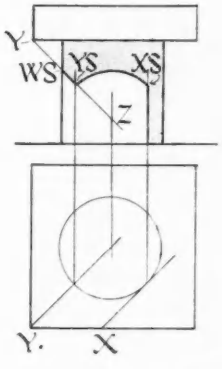


DIAGRAM 20a.

plane would appear as a straight line as at WS—YS. When viewed in front elevation such a plane would appear as a true circle, a portion of which appears as the shadow edge at YS—XS.

[*To be concluded.*]

CORRESPONDENCE

SCULPTORS, ARTISTS, AND THE "MISTRESS ART"

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—With regard to "Astragal's" paragraph on "Sculptors, Artists, and the 'Mistress Art,'" perhaps the "Mistress Art" is to blame, but I think architects, particularly in the provinces, have very great difficulty in finding suitable artists to carry out work in connection with their buildings.

Would it be possible for the R.I.B.A. and the National Gallery authorities to have some form of registration of artists? Or perhaps the R.A. would supply the information and the R.I.B.A. would keep the files: lists of names, with photographs of works or references to examples.

No doubt there are fine artists for every kind of work, but architects, especially those in the country, don't know where to find them.

A PROVINCIAL ARCHITECT

SERPENTINE GARDEN WALLS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—With regard to N. L.'s remarks on serpentine garden walls, there is or was a good specimen on the east side of the road from Thorpe Dene, Norwich, to the aerodrome. I do not know the dimensions. Loudon, in his *Encyclopædia of Gardening*, says the curves are at 15 ft. centres, 7 ft. 6 in. radius, and a 9-in. wall may be safely built 15 ft. high, or a 4-in. wall 7 ft. high, if arranged in this way. It undoubtedly makes a pretty wall, but whether it is one that a professional gardener would like is very doubtful. The wiring of such a wall for tree training would be very inconvenient. See also *Gardens for Small Country Houses*, by Miss Jekyll and Sir L. Weaver, p. 108.

Good piers are a better method of making a garden wall stable, and they should be far enough apart to permit of room for one apricot or peach tree between each pair—probably 15 ft. to 20 ft. apart. If the piers are of good projection, say 2 ft. 3 in., and of a face width not less than 14 in., each affords on its three sides a location for a small tree or, say, three cordons. Such buttresses, besides being a shelter to the wall, are of greater value as a support against wind than mere piers, and add greatly to the appearance.

Incidentally, a walled garden should have walls 10 ft., but preferably 12 ft., high. With 12-ft. walls on three sides at least, and maybe an 8- or 10-ft. one on the south, and an enclosure about 170 ft. by 130 ft., or half an acre, you get a walled garden that gives the proper feeling of being an enclosed wall garden—in gardens much larger than this that feeling is lost.

Another matter is as to the thickness of the walls. A 9-in. wall cannot be finished very nicely on both faces owing to the diversity in size of bricks; a 14-in. wall is better. I have built a wall 9 in. thick in rat-trap bond with the whole of the bricks on edge, in order to economize bricks and make a warm, because largely hollow, wall'; but owing to the stretchers showing their lower faces, which are scored and pulled in the making, the appearance of the wall is not very satisfactory. It would be better, I think, if the frogs had been turned outwards. The saving in bricks is one quarter of the number needed for a solid wall.

W. B. HOPKINS

SOCIETIES AND INSTITUTIONS

R.I.B.A. COUNCIL MEETING

Following are notes from the minutes of the last meeting of the Council of the R.I.B.A.:

On the recommendation of the Allied Societies' Conference it was decided to hold the conference at Norwich in 1930.

It was decided to refer the proposals contained in Mr. Wm. Haywood's paper on "The Control of Elevations," read before the British Architects' Conference at York, to the Art Standing Committee and the Town Planning and Housing Committee for consideration and report.

The Council appointed Mr. A. J. A. Illingworth, A.R.I.B.A., to serve on the Examination Board in India in place of Mr. S. K. Bhedwar, F.R.I.B.A., who has resigned.

It was decided to amend the regulation governing candidature for the Owen Jones Studentship to read as follows: "Candidates for the Owen Jones Studentship will be required to submit with their applications and certificates of their qualifications, drawings (some of which may be from existing buildings) and sketches and explanatory notes to show their knowledge of colour theory and decoration, and of the leading subjects treated in Owen Jones's *Grammar of Ornament*."

It was decided to renew the annual grant of £100 to the Architectural Association for the year 1929.

Mr. L. Sylvester Sullivan, chairman of the Board of Architectural Education, was appointed as one of the two R.I.B.A. representatives on the Council of the British School at Rome.

Mr. Henry M. Fletcher, F.R.I.B.A., was appointed as the R.I.B.A. representative on the Managing Committee of the British School at Athens.

Mr. J. C. Wynnes, F.R.I.B.A., was appointed as the R.I.B.A. representative at the World Engineering Congress, Tokio.

Mr. H. D. Searles-Wood, F.R.I.B.A., and Lt.-Col. P. A. Hopkins, L.R.I.B.A., were reappointed as the R.I.B.A. representatives on the Standing Committee on Water Regulations of the British Waterworks Association.

Mr. T. R. Milburn, F.R.I.B.A., was appointed as the R.I.B.A. delegate at the fifteenth annual conference of the National Association for the Prevention of Tuberculosis, which will be held at Newcastle-on-Tyne on October 10, 11, and 12.

Colonel H. Biddulph, Director of Works and Buildings, Air Ministry, was added to the committee recently set up to consider the architectural design of aerodromes.

It was reported that a chapter of the Essex Society of Architects has been established to cover the County of Hertfordshire. The Council approved this extension of the province of the Society and also the application to change the title to that of "The Essex, Cambridge, and Hertfordshire Society of Architects."

The following resignations were accepted with regret: Miss Isabel Maud Checkley, A.R.I.B.A., and Messrs. John Barbour, L.R.I.B.A., and A. William West, L.R.I.B.A.

R.I.B.A. MEDAL FOR ESSEX, CAMBRIDGE, AND HERTFORDSHIRE

The Council of the Essex, Cambridge and Hertfordshire Society of Architects has accepted the offer of the R.I.B.A. to present a bronze medal for a building of outstanding merit erected in Essex, Cambridge and Hertfordshire during the year ending December 31, 1928. It has been decided to examine buildings of outstanding merit in those counties, completed within that period, and to award the medal to the architect of the selected building. Members are being asked to nominate a building, the claims of which it is considered should receive the attention of the jury. Forms of nomination are to be returned not later than August 15, to Messrs. D. N. Martin Kaye, F.R.I.B.A., and H. Wheeler, joint hon. secretaries.

R.I.B.A. EXAMINATIONS

The questions set at the intermediate, final, and special examinations held in June and July, 1929, have been published, and are on sale at the Royal Institute, price 1s. (exclusive of postage).

A NEW ARCHITECTURAL SOCIETY

A new society has been formed under the title of the Lincolnshire Society of Architects, with the following officers: President, Mr. W. G. Watkins, F.R.I.B.A. (Lincoln); vice-president, Mr. H. S. Hall, L.R.I.B.A. (Grimsby). Members of Council: Messrs. W. Bond, F.R.I.B.A. (Grantham); H. G. Gamble, F.R.I.B.A. (Lincoln); W. E. N. Webster, F.R.I.B.A. (Spalding); hon. secretary and treasurer, Mr. P. W. Birkett, A.R.I.B.A. (Lincoln).

OLD KING'S HOUSE, JAMAICA

The following resolution was passed at a meeting held under the chairmanship of Sir Martin Conway, M.P., at the R.I.B.A.: "That Old King's House, Jamaica, which was damaged by fire in 1925, is still a building of great architectural value. That its really considerable importance as a document of Colonial and Imperial history should be brought before the responsible authorities in Jamaica and also the Colonial Office in London, with the object of urging that steps be taken as soon as possible to preserve and restore the building. It is noted with regret that insufficient care has been taken of the fabric since the fire; that it has been unnecessarily defaced by the removal of bricks and stones from the walls. It is understood that the Government of Jamaica is in possession of a considerable insurance fund out of which the cost of the necessary work could be defrayed. The building in question forms one of an important group which is arranged on three sides of a great open garden space or square. The central block of the group is the famous Rodney Monument, erected to commemorate a great incident of our naval and colonial history. The two other buildings are still in a reasonably good state of preservation, though doubtless in need of some repair, and the whole scheme represents in itself what is, without question, the finest remaining architectural monument of the Western Hemisphere, built from a design that embodied the best traditions of the English Georgian period of about 1760. It is thought that in view of possible economic growth in the West Indies and the present tendency towards some larger principle of administrative development, such buildings as these might well be adapted as a matter of economy for future public purposes."

R.I.B.A. MAINTENANCE SCHOLARSHIPS

R.I.B.A. maintenance scholarships of £100 have been awarded to Hubert Bennett, of Swinton, Manchester, and F. W. Wright, of Sheffield. The scholarships are tenable in the first instance for one year and are renewable for two further periods of one year each. The R.I.B.A. maintenance scholarship of £50 awarded to A. K. Brown, of Sunderland, has been continued for another year.

COMPETITION CALENDAR

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should be made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

TRADE NOTE

The new lift, giving access to the campanile of Westminster Cathedral, has been put into operation. It was designed by Messrs. Marryat and Scott, and has been built to carry ten passengers at a speed of 350 ft. per minute. There is uniformity of acceleration and deceleration, and elaborate precautions have been taken to ensure the safety of passengers. The driver is in telephonic communication with the porch and the motor-room, and any possibility of a stoppage in mid-air during the journey has been minimized. A number of obstacles had to be overcome before the installation was made possible. Brick-cemented walls had to be removed at the base of the tower, and the angelus bell and its carriage, weighing about 3 tons, had to be raised. Some idea of the magnitude of the task can be gathered from the fact that the steelwork supporting the lift weighs some 72 tons. The work has been carried out under the supervision of the cathedral architect, Mr. L. H. Shattock, A.R.I.B.A.

THE BUILDINGS ILLUSTRATED

The Athenæum, Liverpool (pages 194 to 198). General contractors, Joseph Henshaw and Sons, Chatham Street, Liverpool. Sub-contractors: R. and J. Tilley, painting and decorating; R. W. Haughton, plumbing and sanitary; F. J. Barnes, Ltd., (agents, A. J. Berry, Liverpool), Portland stone; Penmaenmawr and Trinidad Lake Asphalt Co., Ltd., asphalt work; M'Intyre and Sons, Ltd., steel work; Quiggin Bros., Ltd., locks and door furniture; John Stubbs and Sons, tiling; E. A. Clark, firegrates.

Heston Air Park (pages 199 to 204). Blackwell and Meyer, of Bexley Heath, were the contractors for the club-house, cottages, and front of depot hangars; The Ripon Steel Company, of Ripon, Yorkshire, constructed the steel lock-up hangar and the steelwork of the depot hangars; A. Jackaman and Sons, of Slough, were the engineers responsible for the design and construction of the big concrete hangar, and carried out roadwork and paved areas and sewage disposal plant; Z. D. Berry & Co. were the contractors for resthouse; Messrs. Bywater were responsible for the petrol supply system. In front of the hangars is a Tarmac space. The special "Esavian" folding and sliding doors to the main hangar are by The Educational Supply Association.

Pyrford Orthopœdic Hospital, Pyrford, Surrey (pages 208 to 212). General contractor, S. Silk, Woking. Sub-contractors: Benham and Sons, heating; Grierson & Co., electrical work; Alfords, painted friezes; Andrews and Adelizzi, Ltd., floors; Field and Palmer, Ltd., asphalt roofs; Crittall, Ltd., theatre windows and casements; Doulton & Co., sanitary goods; Soole and Son, Ltd., hospital doors; James Gibbons, Ltd., door furniture.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office, by our own patent expert. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

22332. Amboise, J. G., and Concrete, Ltd., and Mathews, C. B. Manufacture of concrete blocks, &c. July 20.

22268. Best, F. M. Controlling acoustic properties of buildings. July 19.

21715. Blanchard, L. L. Chimneys. July 15.

22132. Coalbrookdale Co., Ltd., and Malcolm, W. S. Combined open fire and cooking stoves. July 18.

22307. Farrell, A. Shop, &c., fittings. July 19.

SPECIFICATIONS PUBLISHED

283470. Stoces, B. Method of cooling air.

315202. Emra, F. H. Design of concrete buildings of the stud-and-slab type of construction.

315255. Elliott, C. A., and Elliott and Sons (Reading), Ltd., S. Woodwork and similar framing, and methods of supporting same on walls and other supports.

315548. Parker and Butler, Ltd., and Butler, T. V. Mantelpieces.

315577. Triplex Foundry, Ltd., and Horrell, C. R. Firegrates.

ABSTRACT PUBLISHED

312780. Spooner, H. J., London. Sound-reflectors for windows.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The L.C.C. is to develop a further section of the DOWNHAM estate by the erection of 193 houses.

Plans passed by NORTHFLEET U.D.C.: Alterations and additions, 16 Springhead Road, for Mr. W. Gould.

LEWISHAM B.C. has under consideration a proposal for concreting the bed of the river Quaggy in order to improve the flow at a cost of £12,000.

Temperance Billiard Halls, Ltd., have acquired from the LONDON County Council land in Brixton Road for the erection of a billiard hall.

The LONDON County Council is to acquire compulsorily a site of two and a-half acres in Peckham Road for the erection of tenements.

The L.C.C. is to further continue the development of the St. Helier estate at MORDEN by the erection of 960 houses and flats at a cost of £595,000.

WOOLWICH B.C. has acquired premises in Wellington Street as a site for the provision of additional office accommodation.

The LONDON County Council has passed amended plans of Messrs. Trehearne and Norman for the erection of buildings on the site of 456–8 Oxford Street and 28–32 Orchard Street.

The L.C.C. has passed plans submitted by Mr. A. G. Alexander for the erection of a cinema on a site at Essex Road, River Street, and Astey's Row, ISLINGTON.

Bush House (Extensions), Ltd., are arranging with the LONDON County Council for a lease of the western side of Bush House, with frontages to the Strand and Montreal Place, at a ground rent of £11,000 per annum.

East Ham Woodcraft, Ltd., are to erect factory premises near CHADWELL HEATH railway station for light and fancy woodworking. Accommodation is to be first provided for 500 workers and eventually for 1,000.

The L.C.C. has prepared plans for the development of a further section of the BECONTREE estate at a cost of £169,000, provision being made for the erection of 310 houses and flats and 39 shops.

The LONDON County Council will shortly place contracts for the erection of tenements at China Walk, Lambeth; at Dickens estate, Bermondsey; at Whitmore estate, Hoxton; and at Hughes Field estate, Deptford, at an estimated cost of £235,000.

Plans passed by the LEWISHAM B.C.: Laboratory, Fairlawn, Honor Oak Road, for Burmah Oil Co., Ltd.; rebuilding, 85 Rushey Green, for Mr. Parnacott; houses, Daneby Road, for Mr. J. Watt; ten houses, Holme Lacey Road, for Messrs. W. J. Scudamore, Ltd.

Plans passed by the WATFORD Corporation: New vestry, Meeting Alley, for the Gospel Mission; new road, Cassiobury estate, for the Cassiobury Estates, Ltd.; two houses, The Gardens, for Messrs. Jones and Russell; shops, flats, and garages, High Street, for Mr. W. Pryor; two houses, Woodland Drive, for Messrs. Richards & Co.; addition, St. Albans Road, for Messrs. Apem & Co.; two houses, Parkside Drive, for Mr. H. S. Brown; two houses, Temple Close, for Mr. Carter; alterations, 129 High Street, for Messrs. Chater; bank premises, High Street, for the Westminster Bank, Ltd.; four houses, Kelmscott Close, for Messrs. Bracey Roads, Ltd.; new treatment block, Rickmansworth Road, for the Watford Peace Memorial Hospital; store, High Street, for the Grosvenor Battery Co.; alterations and additions, High Street, for Messrs. Bucks, Ltd.

SOUTHERN COUNTIES

HAMPSHIRE County Council proposes to proceed with a scheme for the provision of accommodation for mental defectives.

Hampshire Education Committee has purchased eleven acres at BROCKENHURST for a new secondary school and playing fields.

Plans passed by the GUILDFORD Corporation: Warehouse, North Place, for the Guildford and District Industrial Co-operative Society, Ltd.; two houses, Ganghill Copse, for Onyx County estates; house, Weston Road, for Mr. J. P. Clements; alterations and additions, The Royal Hotel, Stoughton, for Messrs. Courage and Co., Ltd.; extension to showroom, 12 Quarry Street, for Mr. Nathan Sapirstein; house, Poltimore Road, for Mr. S. D. Pendry; house, Guildown Avenue, for Messrs. Tribe and Robinson; house, Boxgrove Avenue, for Mr. W. R. Stirling; two houses, Poltimore Road, for Mr. A. J. Gostelow; alterations, 92 High Street, for Mr. G. A. Perridge; residence, Harvey Road, for Mr. J. Cecil Gould; layout of new road, south side of London Road, for Mr. A. C. Burlingham; new premises, Stoke Fields, for Haydon Furnishing Co.; additions and alterations, Quarry Street, for Messrs. Chas. Holdens, Ltd.; alterations and additions, 56 and 57 Quarry Street, for Messrs. Capron and Sparkes.

Plans passed by the BRIGHTON Corporation: Alterations, 36–36A London Road, for Messrs. Freeman, Hardy and Willis, Ltd.; alterations and additions, 102–103 Queen's Road, for the Governors of the Sussex Eye Hospital; five shops, Mafeking Road, for Mr. Charles Blaker; five houses, Hertford Road, for Messrs. Braybons, Ltd.; canopy, Princes Cinema, North Street, for Mr. W. Hughes; laboratory and lecture room, Xaverian College, Power Road, for Mr. Cuthbert Unwin; alterations, Chichester Diocesan Training College, Ditchling Road, for the College Committee; alterations, 74–78 Western Road, for Messrs. Chipperfield and Butler; rebuilding 1 and 3 Preston Road, for Barclays Bank, Ltd.; new entrances, Albion Hotel, Old Steine, for Mr. Harry John Preston; rebuilding, 179–180 Western Road, for Brighton Corporation; gymnasium, Royal Alexandra Hospital, Dyke Road, for the hospital governors; alterations and additions, 102–103 Queen's Road, for the Sussex Eye Hospital governors; two houses, Preston Drive, for Mr. G. Burtenshaw Nixon; rebuilding, 192 Western Road, and partial reconstruction, 36 and 36A London Road and 13 St. James's Street, for Messrs. Freeman, Hardy and Willis, Ltd.; layout of estate, Reynolds Avenue, for Mr. T. J. Braybon; six houses, Withdean Crescent, for Messrs. James Ticehurst & Co.

Plans passed by the OXFORD Corporation: Extensions, Chequers Inn, Headington, for Messrs. Halls Oxford Brewery, Ltd.; club room, Original Swan P.H., Cowley, for Messrs. Halls Oxford Brewery, Ltd.; shop, Rymers Lane, Cowley, for Mr. Roberts; house, Divinity Road, for Dr. G. H. Mann; house, Upland Park Road, for Dr. Rankin; bungalow, York Avenue, Headington, for Mr. G. Talboys; bungalow, Chestnut Grove, for Mr. A. F. Coppock; house, Barracks Road, for Mr. E. K. Belsten; Bank, London Road, Headington, for Lloyds Bank, Ltd.; two houses, Binsey Lane, for Mr. D. Mealing; house, Sandfield Road, Headington, for The Manor Estate Co.; house, Ashgrove Avenue, Headington, for Mr. S. G. Bennett; house, Chestnut Grove, for Mr. F. Johnson; two houses and shops, Ashgrove Avenue, for Mr. H. W. Jacobs; alterations, 3 Ship Street, for Messrs. T. Hyde and Co.; house, High Street, Wolvercote, for Mr. G. T. Bennett; alterations to buildings, Dead Man's Walk, for the Warden and Fellows of Merton College; two houses, Glanville Road, for Mr. F. Organ; bank, Cowley Road, for Barclays Bank, Ltd.; two houses, Crescent Road, for the Allied Building Corporation.

SOUTH-EASTERN COUNTIES

BEXHILL Corporation Housing Committee is to invite tenders for the erection of a further twelve houses at Little Common.

Plans passed by the CHELMSFORD Corporation: Alterations and additions, Union Casual Blocks, Wood Street, for the Chelmsford Board of Guardians; five houses, Waterhouse Street, for Mr. A. B. Parker; store, Angel Yard, Tindal Street, for Messrs. Hasler and Hance; six houses, Longstomps Avenue, for Mr. R. H. Currie; valve-test room, Marconi Road, and alterations to messroom, New Street, for Marconi's Wireless Telegraph Co., Ltd.; shelter and conveniences, recreation ground, Sandford Road, for the Corporation; two houses, Goldlay Avenue, for Messrs. E. Allen and Sons.

Plans passed by the BEXHILL Corporation: Bungalow, Whydown, for Mr. J. E. Maynard; bungalow, Pebsham, for Mr. E. Bunce; hospital, Hollier's Hill, for Messrs. G. H. Denne and Son, Ltd.; house, Cranston Rise, for Mr. J. H. Lye; house, Manor Road, for the Misses Saffrey and Oslar; bungalow, Chantry Avenue, for Mr. A. F. Wellington; alterations, The Castle Hotel, Buckhurst Place, for Messrs. H. Ward, Son and Wray; house, Cooden Drive, for Mr. J. E. Maynard; house, De La Warr Road, for Mr. F. A. Grove; house, Westville Road, for Mr. J. Alderson; house, Barnhorn Road, for Mr. G. E. Matthews.

SOUTH-WESTERN COUNTIES

PLYMOUTH Corporation has decided to purchase a site at Roborough for the purpose of a municipal aerodrome.

PLYMOUTH Corporation has obtained sanction from the Minister of Health to the proposal to erect premises in Devonport Park as a maternity and child welfare centre and to adopt the Minister's suggestion for obtaining alternative tenders for building the premises in brick.



Shop, 170 Argyle Street, Glasgow, for Edward Watson, Sons & Co. By Launcelot H. Ross. The front is faced with Greek white statuary marble with Belgian black base and turquin blue bands below sun blind. The woodwork is in teak. The walls of the interior are lined with Greek white statuary marble with a black base and turquin blue band at the top. The public floor space is floored with white floor tiles enclosed in a marble border. For plan *see page 221.*

Plans passed by the NEWBURY Corporation: Two houses, Enborne Road, for Messrs. Cooke Bros.: garage, new street off St. Michael's Road, for Mr. A. N. Hughes; garage and coal store, Priory Road, for Mr. S. E. Clinch; temporary clubroom, new street off St. Michael's Road, for Mr. G. R. Parry.

The Minister of Health has sanctioned the proposal of the PLYMOUTH Corporation to borrow £71,885 in connection with the centralization of the treatment of infectious diseases other than smallpox at the Swilly Hospital, the centralization of the treatment of intermediate and advanced cases of tuberculosis at the Mount Gold Hospital, and the erection of an orthopædic pavilion and surgical block on the site adjoining the latter hospital.

Plans passed by the BOURNEMOUTH Corporation: Alterations and additions, St. Andrew's Parish Hall, Shelbourne Road, for the Parochial Committee; additions, 42 Littledown Road, for the Bournemouth Steam Laundry Co., Ltd.; house, Keswick Road, for Mrs. Ayles; house, College Road, for Mr. C. T. Turner; alterations and additions, The Tollard Royal Hotel, West Cliff, for Mr. A. Rosenberg; additions, Boscombe Picture House, Christchurch Road, Boscombe, for the Boscombe Picture Co.; additions, Highcliff House, Beacon Road, for The Highcliff Hotels, Ltd.; organ-blower chamber, Wesleyan Church, Jameson Road, for the trustees; six houses, Rosebud Avenue, for Messrs. A. C. Barnes & Co.; three houses, The Avenue, Moordown, for Mr. F. Moorman; house, Beaufort Road, for Mr. A. S. Prince; house, Queen's Park Avenue, for Mr. H. W. Snelling; house, Carbery Avenue, for Mr. A. Webb; ten houses, Broadley Road, for Mr. S. Kermode; five houses, Barrie Road, for Mr. F. Moorman; two houses, Westfield Road, for Mr. W. R. Wilkins; additions, 983 Christchurch Road, Pokesdown, for Mr. Hipwell; two houses, Ashton Road, for Messrs. G. L. Luckham and Son; two houses, Elmes Road, for Mr. F. K. Dowden; hall, Portland Road, for The Winton and Moordown R.A.O.B. Club and Institute, Ltd.; two houses, Pettit Road, for Mr. B. C. Cundall.

Plans passed by the POOLE Corporation: House, Valley Road, C. L. Pryce, for H. E. A. Gibson; house, Valley Road, for C. Medd; house, Lincoln Road, for P. J. Pooss; house, Sunnyside Road, P. J. Pooss, for W. J. Penny; house, York Road, for P. J. Pooss; house, Harbour Hill Road, C. L. Pryce, for E. Grayer; house, Harbour Hill Road, C. L. Pryce, for Mrs. G. Gould; twenty-five houses over Alder Road, S. G. Ward; house, Pine Avenue, S. G. Ward; house, Buckingham Road, for C. J. Wellman; house, Wimborne Road, F. G. Pearcy; alterations and additions, "Pearlhaven," Flagstead Road, C. T. Miles and Son, for Mrs. Latham Hall; house, Hoyal Road, R. Meech, for W. Martin; house, Hoyal Road R. Meech, for D. V. Samways; house, Hoyal Road, R. Meech, for W. R. Gallop; house, Enfield Road, for V. Head; semi-detached house, off Cole's Avenue, Stokes and Whittle, for H. H. Taylor and Stokes and Whittle; house and garage, Canford Cliffs Road, B. de W. Holding, for S. Gidlow; two houses, Cynthia Road, A. G. Ware, for Ware and Symes; house, Lawson Road (off Oak Grove), S. A. Whitehead, for Pastor Best; house, Harbour Hill Road, H. Hardy, for Mrs. A. Rogers; stable and store, off Sterte Road, C. J. Barfoot, for the White House Laundry; addition to house, "Brantley," Dorchester Road, G. Hoare, for Budgen; house and garage, Orchard Avenue, R. J. Bishop, for G. Berriman; house, Harbour Hill Road, J. Jagger; house and shop, corner Blandford Road and Albert Avenue, S. Whitelock & Co., for Mrs. D. Brown; four pairs semi-detached houses, corner St. Osmund's Road and Parkstone Avenue, S. Whitelock & Co., for A. S. H. Whitelock; house, Churchfield Road, for Bromby Bros.; alterations and additions, Pineland Model Laundry, Ashley Road, J. Newton, for Pineland Model Laundry; house, Wimborne Road, H. Kendall, for A. V. Mears; pair semi-detached houses, King Street, H. Kendall, for the Poole Charities Trustees; additions to house, "Oakland," Cynthia Road, for E. C. Pitcher; house, Harbour Hill Road, W. G. Crane and Son, for F. Coulton; house and garage, Western Avenue, for A. Barnes; house, Harbour Hill Road, for W. H. G. Boyt; house, Harbour Hill Road, Bartlett and Whiffen, for C. Morrell; house, Harbour Hill Road, Bartlett and Whiffen, for Jones; house, Albert Avenue, B. de Wilde Holding, for Mrs. Dyke; garage, "Burford," Martello Road, C. E. Damen and Son, for Mrs. E. Butler; house (two flats), Ringwood Road, S. C. Rowden, for W. E. Small; sale-room, Seldown Lane (rear 233 High Street), J. Allner, for E. Harker Curtis; house and garage, Dorset Lake Avenue, Rumsby and Rodd, for Mrs. M. W. Joass; house, Tatnam Road, for J. G. Greenslade; house, Shelley Road, H. Hardy, for Burr; house, Herbert Avenue, M. J. Lawford; house, Livingstone Road, M. J. Lawford, for A. W. Padwick; two houses, St. Mary's Road, for W. Blackmore; house, Uppleby Road, S. E. Bracher, for A. V. Gibbs; three houses, Gloucester Road, for Philpotts and Manners; house, Alder Road, D. F. Hilliar, for Cresselick; alterations and additions, 78 High Street, for F. W. Woolworth & Co., Ltd.; house, Hill Road, for H. E. J. Bailey; conservatory addition to house, 42 Cranbrook Road, C. C. G. Osborne, for Messrs. George and Harding; house, Mayfield Avenue, for Mrs. B. Lintott; house, Stanley Green Road, R. C. Webber, for W. R. Andrews; house, Ringwood Road, for C. Carter; garage addition to house, 15 Overbury Road, C. F. Knight, for Col. Ditmas.

MIDLAND COUNTIES

Messrs. J. A. Crabtree & Co. are to erect a factory in Lincoln Road, WALSALL.

WALSALL Corporation has purchased seven acres at Well Lane, Harden, for a housing scheme.

The Douglas Haig Trustees have acquired land on the Braunstone estate, LEICESTER, for a housing scheme.

LEICESTER Corporation is to complete the roads on the Braunstone housing estate at a cost of £64,000.

LEICESTER Corporation has acquired land in Stoneygate Avenue for the erection of a branch library.

LEICESTER Corporation is to construct a reservoir in connection with the improvement of the water supply to Syston, Barkby and Queniborough.

Birmingham Education Committee is to proceed with the erection of a junior commercial school at SPARKHILL at a cost of £26,550.

BIRMINGHAM Education Committee has scheduled a site on the Tennal Hall estate, Harborne, for the erection of an elementary school.

BIRMINGHAM Education Committee has approved an extension scheme at Erdington secondary school at a cost of £23,000.

BIRMINGHAM Education Committee has selected a site on the Warren Farm estate, Perry Barr, for the erection of an elementary school.

BIRMINGHAM Education Committee is to proceed with the erection of a council school at Thornton Road, Washwood Heath, at a cost of £17,000.

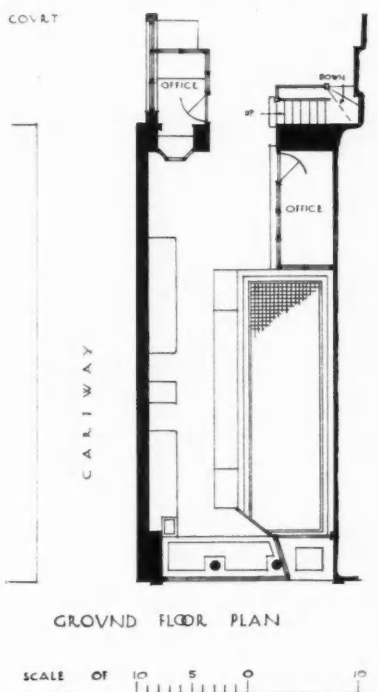
The trustees of the Douglas Haig Memorial Homes have obtained land on the Billesley Common estate, BIRMINGHAM, for the erection of flats.

The Salvation Army authorities have obtained a site for the erection of a church in Blakesley Road, Yardley, BIRMINGHAM.

SMETHWICK Education Committee has decided to invite tenders for the erection of a new elementary school at Uplands.

SMETHWICK Corporation has obtained sanction to borrow £13,223 for the erection of a central clinic and tenders are now to be invited.

LEICESTER Corporation Markets Committee has purchased property in Hastings Terrace required in connection with the extension of the wholesale market.



Plan of shop, 170 Argyle Street, Glasgow, for Edward Watson, Sons & Co. By Launcelot H. Ross.

NORTHAMPTON Corporation Housing Committee is to invite tenders for the erection of twenty-five houses (non-parlour and three bedrooms and non-parlour and two bedrooms) on St. David's estate.

LEEDS Corporation has approved the plan of the city engineer for the layout of a housing site and asked him to submit an estimate of the cost of the erection, by direct labour, of twenty-eight type A.3 houses and twelve type A.3 cottage flats.

Plans passed by the NORTHAMPTON Corporation: Two houses, Weston Way, Weston Favell, for the executors of Mr. Henry Green; additions, Mission Church, Lindsay Avenue, for the Rector of Abington; showroom, Ash Street, for Messrs. H. J. Payne and Sons; alterations, St. John's Hospital, Bridge Street, for the trustees; alterations and additions, 33 Semilong Road, for Northampton Co-operative Society, Ltd.; two houses, Ardington Road, for Northampton Co-operative Society, Ltd.; two houses, Ardington Road, for Messrs. Stafford and Agutter.

Plans passed by the SMETHWICK Corporation: Twenty-seven houses, Dibble estate, for the Excelda Housing Society, Ltd.; two houses, Thuree Road, for Messrs. W. C. Stevens, Ltd.; pavilion, Waterloo Road, for Messrs. Bellis and Morcom, Ltd.; new hall, Windmill Lane, for the Salvation Army; new premises, Oldbury Road, for Barclays Bank, Ltd.; lavatory accommodation, Windmill Lane Market, for Lloyds Estates and Markets, Ltd.; extension to 63 and 65 Cape Hill, and alterations and extension to 584 and 586 Bearwood Road, for Messrs. F. W. Woolworth & Co., Ltd.; extension to drawing office, Dartmouth Road, for the Birmingham Aluminium Casting Co., Ltd.

NORTHERN COUNTIES

SOUTH SHIELDS Education Committee is to erect an elementary school for 800 at the Cleadon Park estate.

DURHAM County Education Committee is to erect an elementary school for 450 children at Shotton.

DURHAM County Education Committee is to erect an elementary school for 800 children at Crook.

LEEDS Corporation has decided to approach the London and North Eastern and the London Midland and Scottish Railway Companies as to the desirability of linking up the principal railway stations in the city and the improvement of the entrance to the Wellington Station from City Square with a view to providing work for the relief of unemployment.

Plans passed by the LEEDS Corporation: Fifteen houses, York Road, Harrison Crescent and Wykebeck Valley Road, for Mr. William Jowitt; two houses, Low Moor Side Lane, Farnley, for Mr. Ernest Newton; two houses, Stainbeck Lane, Chapel Allerton, for Mr. E. S. Rogers; house, King Lane, Alwoodley, for Mr. John Spence Horsfield; two houses, Richardson Road, Osmondthorpe, for Mr. Harold V. Waite; four houses, Stainburn Crescent, Moortown, for Mr. John A. Lister; fourteen houses, Gipton Wood Avenue and Arlington Road, Harehills, for Messrs. Bailey Brothers; six houses, Foundry Lane, Seacroft, for Messrs. C. M. Coates and J. W. Shaw; six houses, Oakwood Drive, for Messrs. Henry Lax, Ltd.; four houses, Stainburn Drive, Moortown, for Mr. Edward Ashton; four houses, Stonegate Road, Meanwood, for Mr. J. W. Broadbent; four houses, Roper Avenue and Denton Avenue, Roundhay, for Messrs. Lazenby Brothers; two houses, Stonegate Road, Meanwood, for Mr. F. Dove; two houses, White Hall Road, for Mr. Harry Holgate; two houses, Broomfield, Adel, for Mr. H. Skellington; two houses, Easterly Avenue, Harehills, for Mr. F. M. Weston; two houses, Mavis Lane, Cookridge, for Mr. R. P. Ellis; two houses, The Oval, Killingbeck, for Mr. Darcy B. Wilson; four houses, Selby Road, Halton, for Mr. G. Fenwick.

NORTH-EASTERN COUNTIES

The Level Crossings (Special) Committee of the HULL Corporation has prepared a new scheme for the abolition of Wincolmlee crossing at a cost of £1,087,602. This is £34,350 less than the cost of the 1925 scheme. Sir Henry Maybury and Mr. F. Palmer are to advise the Corporation upon the scheme.

Plans passed by the HULL Corporation: Twelve houses, Eastfield Road, for Mr. G. T. Rignall; two houses, Woldcarr Road, for Mr. C. H. Smith; eight houses, Goddard Avenue, for Mr. A. Johnson; two houses, Ings Road, for Mr. H. Needler; nine houses, James Reckett Avenue, for Mr. D. Curtis; two houses, Gillshill Road, for Mr. S. Bays; new street, Silverdale Road, for Messrs. Waller and Watts; new street, Strathmore Avenue, for Messrs. Waller and Watts; three houses, Southfield Road, Bricknell Avenue, for Mr. E. Mowforth; six houses, Pickering Road, for Mr. S. H. Wrightson; eight houses, Pickering Road, for Mr. D. Smith; forty-two houses, Riversdale Road and Silverdale Road, for Mr. F. Runton Waller; two houses, Riversdale Road, for Mr. B. Barnaby; four houses, Riversdale Road, for Mr. W. Garbutt; eight houses, Goddard Avenue, for Mr. A. Johnson; four houses, Riversdale Road, for Mr. W. Garbutt; six houses, Watt Street, for Mr. John Needler.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A	Barnard Castle	N.E. Coast	1 7½	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead ..	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood ..	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A	Consett ..	N.E. Coast	1 7½	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A_1	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone. 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 10 0
Pit gravel, per yd.	0 15 0
Pit sand, per yd.	0 12 6
Washed sand, per yd.	0 13 0
Screened ballast or gravel, add 10 per cent. per yd.	
Clinker, breeze, etc., prices according to locality.	
Portland cement, per ton	£2 8 0
Lias lime, per ton	2 0 0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.	

Transport hire per day:

Cart and horse	£1 3 0	*Trailer*	£0	15	0
3-ton motor lorry	3 15 0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4 0 0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0 1 6
SPREAD and level, including wheeling, per yd.	0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0 10 6
TRIMMING earth to slopes, per yd. sup.	0 0 6
HACKING up old grano. or similar paving, per yd. sup.	0 1 3
PLANKING to excavations, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.	
IF left in, add to above prices, per ft. cube	0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0 2 1
DO. 6 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube	2 3 0
DO. 6-2-1, per yd. cube	1 18 0
DO. in upper floors, add 15 per cent.	
DO. in reinforced-concrete work, add 20 per cent.	
DO. in underpinning, add 60 per cent.	
LIAS-LIME CONCRETE, per yd. cube	£1 16 0
BREEZE CONCRETE, per yd. cube	1 7 0
DO. in lintels, etc., per ft. cube	0 1 6
CEMENT concrete 4-2-1 in lintels packed around reinforcement, per ft. cube	0 3 9
FINE concrete benching to bottom of manholes, per ft. cube	0 3 0
FINISHING surface of concrete spade face, per yd. sup.	0 0 9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0 0 10
DO. *6 in., per ft.*	0 1 3
DO. *9 in., per ft.*	0 2 3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 5 6
DO. *6 in., per yd.*	0 8 0
Portland cement and sand, see "Excavator" above.	
Leadwool, per cwt.	£2 0 0
Gaskin, per lb.	0 0 4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0 8 3
DO. 6 in., per ft.	0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4 5 0
Flettons, per M.	2 12 6
White facing bricks, per M.	5 0 0
Multi-coloured facings, per M.	7 7 9
Best red facings, per M.	7 7 9
Rubbers, 9¾ in., per M.	12 0 6
Staffordshire blue, per M.	9 5 0
Firebricks, 2½ in., per M.	9 0 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. *headers, per M.*	20 10 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	

Lime, grey stone, per ton	£2 11 6
Mixed lime mortar, per yd.	1 6 0
Dampcourse, in rolls of 4½ in., per roll	0 2 6
DO. *9 in. per roll*	0 4 9
DO. *14 in. per roll*	0 7 6
DO. *18 in. per roll*	0 9 6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32 0 0
DO. in cement do., per rod	34 10 0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0 1 0
BEDDING plates in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING do. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
DO. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
DO. picked stocks, per ft. sup. extra	0 0 7
DO. red rubbers gauged and set in putty, per ft. sup. extra	0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in. per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around gullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 9
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 11 0
York templates sawn, per ft. cube	0 7 6
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	

HOISTING and setting stone, per ft. cube	£0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.	
PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup.	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do., per ft. run	0 1 4
HALF SAWING, per ft. sup.	0 1 0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	£0 0 7½
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 7 6
YORK SILLS, W. & T., ft. cub. fixed	1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0 1 3
DO. 2½ in. thick, per ft. sup.	0 1 6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies		£13 0 0
Countess		25 0 0
Duchess		32 0 0
Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8 3 9
Grey-green do., per ton	7 3 9
Green peggies, 12 in. to 8 in. long, per ton	5 13 9
In 4-ton truck loads, delivered Nine Elms station.	
Clips, lead per lb.	£0 0 6
Clips, copper, per lb.	0 2 0
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 2 2
Cement and sand, see "Excavator," etc., above.	
Hand-made tiles, per M	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
DO. *Peggies, per ton*	7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6 7 0
Grey-green do.	5 9 0
Green peggies, 12 in. to 8 in. long	4 13 6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3 17 6
DO., machine-made do., per square	3 7 6
Vertical Tiling, including pointing, add 18s. 0d. per square.	
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22 0 0
11 × 4, per std.	30 0 0

Memel or Equal. Slightly less than foregoing.

Flooring, P.E., 1 in., per sq.	£1 5 0
DO. *T. and G., 1 in., per sq.*	1 5 0
Planed boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 1 4
Mahogany, Honduras, per ft. sup. of 1 in.	0 1 4
DO. *Cuba, per ft. sup. of 1 in.*	0 2 6
DO., *African, per ft. sup.*	0 1 3
Teak, per ft. sup. of 1 in.	0 1 3
DO., *ft. cube*	0 14 0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 4 9
DO. framed in floors, roofs, etc., per ft. cube	0 5 6
DO. framed in trusses, etc., including ironwork, per ft. cube	0 8 6
PITCH PINE, add 33⅓ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO. 3-ply per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0 0 4½
DO. 9 in. wide and over per ft. sup.	0 1 2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, c. k sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and headed, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals 1s. 9½d. per hour;* MATE, *do. 1s. 4d. per hour;* ERECTOR, *1s. 9½d. per hour;* FITTER, *1s. 9½d. per hour;* LABOURER, *1s. 4d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in. per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, *1s. 9½d. per hour;* MATE OR LABOURER, *1s. 4½d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	6
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc. per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, *1s. 9½d. per hour (plus allowances in London only);* LABOURER, *1s. 4d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, *1s. 8d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in. up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅜ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span, 1s. 6d. to 2s. per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0
Glazing only, polished plate, 6½d. to 8d. per ft. according to size.			

PAINTER AND PAPERHANGER

PAINTER, *1s. 8d. per hour;* LABOURER, *1s. 4d. per hour;* FRENCH POLISHER, *1s. 9d. per hour;* PAPERHANGER, *1s. 8d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens or boards, plain "diamond" pe square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 3/16 in. punched per M	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	1/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, AUGUST 14

IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY, Imperial Institute Road, South Kensington, S.W.7. Exhibition of Royal Society of Arts Competition of Industrial Designs, 1929. Open daily until September.
NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Some Caricaturists." By John Steegmann, M.A. **3 p.m.**
LONDON SOCIETY. Visit to Somerset House, Strand, and the Register Office. **3.30 p.m.**

FRIDAY, AUGUST 16

SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Lighting and Illumination." By G. Tilghman Richards. **12 noon.**

SATURDAY, AUGUST 17

Sunrise, 5.47. Sunset, 8.20.
HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, Excursion.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By L. O. Faraker. 3 p.m. "Italian Renaissance Furniture." By L. O. Faraker. 7 p.m. **3 p.m.**
WALLACE COLLECTION, Manchester Square, W.1. "French Furniture." By W. P. Gibson. **12 noon.**

MONDAY, AUGUST 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. "Spanish Architecture and Sculpture." By Miss M. Chamot. 12 noon. "Spanish Textiles and Pottery." By Miss M. Chamot. 3 p.m. **12 noon.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Landmarks of Electrical Discovery." By L. W. Phillips. **12 noon.**

TUESDAY, AUGUST 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Tapestries." By Miss M. Chamot. **3 p.m.**

WEDNESDAY, AUGUST 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Stained Glass." By Miss M. Chamot. **12 noon.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Travel by Road and Rail." By L. W. Phillips. **12 noon.**
BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Dark Races—III." By the Official Guide Lecturer. **3 p.m.**

THURSDAY, AUGUST 22

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Renaissance Furniture." By L. O. Faraker. "Etching." By Miss M. Chamot. **7 p.m.**
BRITISH MUSEUM, W.C.1. "Origins of Architecture—II (Roman)." By Cecil Hallett, B.A., F.S.A. **12 noon.**

FRIDAY, AUGUST 23

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By Miss M. Chamot. 12 noon. "Byzantine Art." By Miss M. Chamot. 3 p.m. **12 noon.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Lighting and Illumination." By L. W. Phillips. **3 p.m.**

SATURDAY, AUGUST 24

Sunrise, 5.58. Sunset, 8.5.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Eighteenth Century Furniture." By L. O. Faraker. 7 p.m. "Italian Decoration." By Miss M. Chamot. 7 p.m. **7 p.m.**
SCIENCE MUSEUM, Exhibition Road. South Kensington, S.W.7. "Applications of Electricity." By L. W. Phillips. **3 p.m.**

MONDAY, AUGUST 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By Miss M. Chamot 12 noon. "Northern Sculpture." By T. F. Wilson. 3 p.m. **12 noon.**
SCIENCE MUSEUM, South Kensington, S.W.7. "Noteworthy Engineering Achievements." By L. W. Phillips, M.I.E.E., A.INST.P. **3 p.m.**

TUESDAY, AUGUST 27

NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Architects from Wren to Adam." By John Steegmann, M.A. **3 p.m.**
WALLACE COLLECTION, Manchester Square, W.1. "French Furniture." By W. P. Gibson. **3 p.m.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Travel by Road and Rail." By L. W. Phillips. **3 p.m.**

WEDNESDAY, AUGUST 28

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Arts and Crafts." By T. F. Wilson, F.R.S.A.I. **3 p.m.**
NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Some Later Architects." By John Steegmann, M.A. **3 p.m.**
BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Dark Races—IV." By the Official Guide Lecturer. **12 noon.**

THURSDAY, AUGUST 29

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. **3 p.m.**
BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Middle Ages." By the Official Guide Lecturer. **3 p.m.**

FRIDAY, AUGUST 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By L. O. Faraker. 12 noon. "Chippendale." By T. F. Wilson F.R.S.A.I. 3 p.m. **12 noon.**

SATURDAY, AUGUST 31

Sunrise, 6.10. Sunset, 7.50.
A.A.S.T.A. Summer Tour to the Rhineland via the Ardennes and the Moselle. From the evening of August 31 to September 8 or 12.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Furniture of the Seventeenth Century." By L. O. Faraker. 12 noon. "English Furniture of the Eighteenth Century." By L. O. Faraker. 3 p.m. Indian Section: "Mogul Art." By T. F. Wilson. 3 p.m. "Eighteenth-century Furniture." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon.**

MONDAY, SEPTEMBER 2

WALLACE COLLECTION, Manchester Square, W.1. "English Portraits." By W. P. Gibson. **3 p.m.**
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Costumes." By L. O. Faraker. 12 noon. "Costumes of Seventeenth Century." By L. O. Faraker. **12 noon.**
BRITISH MUSEUM, W.C.1. (A) "Monuments of Egypt." (B) "Monuments of Assyria." By Official Guide Lecturers. **3 p.m.**

TUESDAY, SEPTEMBER 3

LONDON SOCIETY. Visit to the Church of St. Andrew-by-the-Wardrobe, Queen Victoria Street, E.C.4. **2.30 p.m.**

WEDNESDAY, SEPTEMBER 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

THURSDAY, SEPTEMBER 5

BRITISH MUSEUM, W.C.1. "Origins of Architecture—I (Greek)." By Cecil Hallett, B.A., F.S.A. 12 noon. "Early Britain—I (Old Stone Age)." By Cecil Hallett, B.A., F.S.A. 3 p.m. **12 noon.**

FRIDAY, SEPTEMBER 6

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 7

Sunrise, 6.21. Sunset, 7.34.
BRITISH MUSEUM, W.C.1. "Early Britain—II (Late Stone Age)." By Cecil Hallett, B.A., F.S.A. **12 noon.**
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

MONDAY, SEPTEMBER 9

ARCHITECTURAL ASSOCIATION. Annual Excursion to Germany. Departure for Hamburg in S.S. "St. Louis."

TUESDAY, SEPTEMBER 10

ARCHITECTURAL ASSOCIATION. Tour to Germany. Arrival at Hamburg.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture—I." 12 noon. "Architecture—II." 3 p.m. Both by L. O. Faraker. **12 noon.**

WEDNESDAY, SEPTEMBER 11

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section "Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 12

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. **12 noon.**

FRIDAY, SEPTEMBER 13

VICTORIA AND ALBERT MUSEUM. South Kensington, S.W.7. "Tudor and Jacobean Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 14

Sunrise, 6.32. Sunset, 7.18.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

TUESDAY, SEPTEMBER 17

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Pottery." By L. O. Faraker. **12 noon.**

WEDNESDAY, SEPTEMBER 18

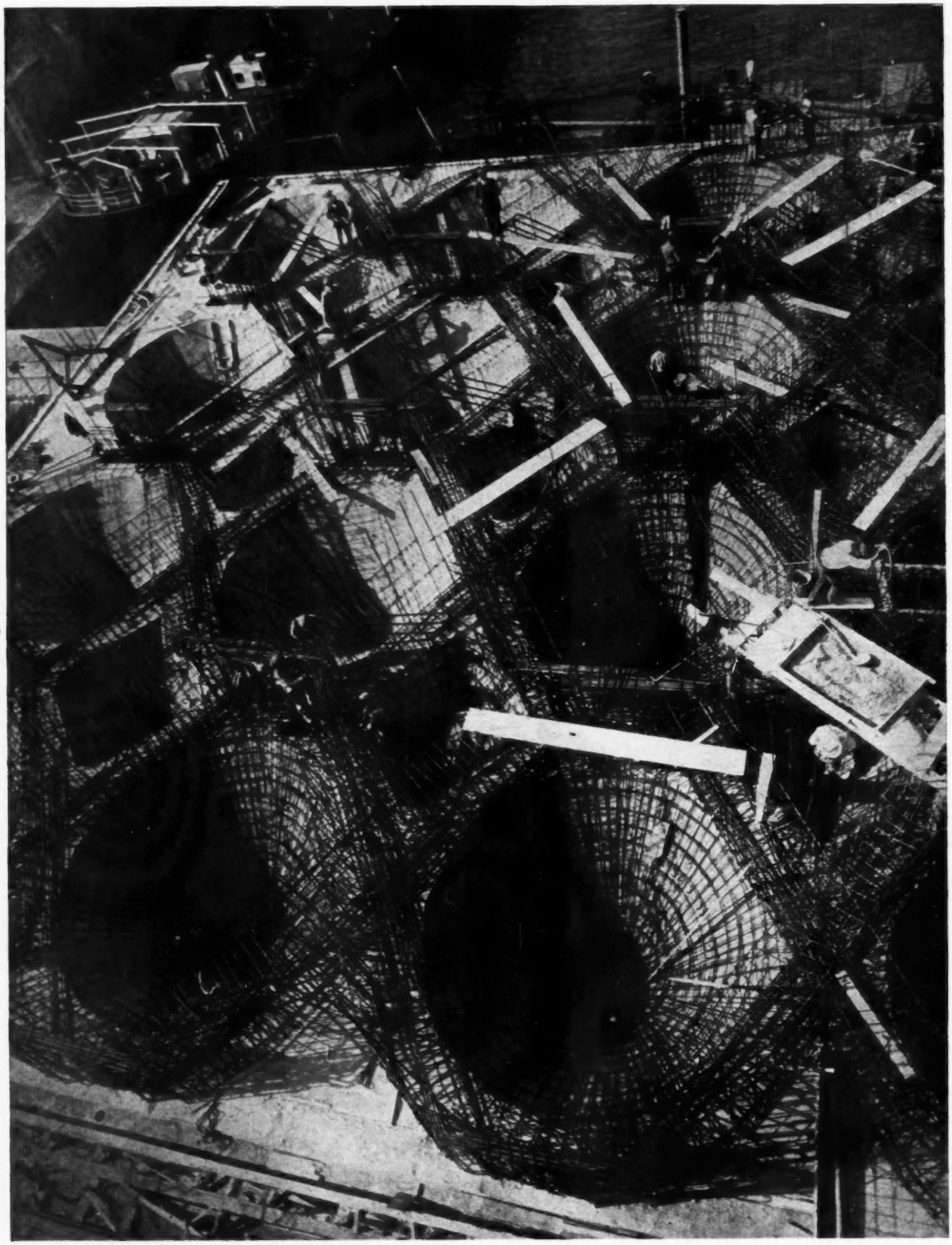
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Metalwork." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Medieval Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

SATURDAY, SEPTEMBER 21

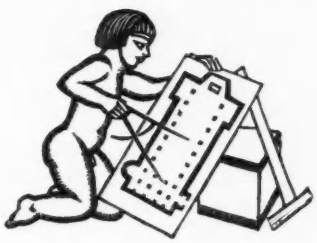
Sunrise, 6.42. Sunset, 7.3.
VICTORIA AND ALBERT MUSEUM, South Kensington. S.W.7. "Chippendale." By T. F. Wilson, F.R.S.A.I. **7 p.m.**



WEAVING BREAD-BASKETS AT MARSEILLES. [*By courtesy of the S.A. d'Entreprises Froment Clavier, Paris.*

An aerial view of an early stage in the construction of a Brobdingnagian grain silo at Marseilles, suggestive of the synchronized weaving of ranks of bread-baskets for ravenous giants. The wickerwork, however, is of steel mesh, its lining of cement-finished reinforced concrete. The tops and bottoms of these vast cylindrical grain bins are conical, to facilitate suctional filling and emptying. Astragal gives some further details and another view of the silo in this issue.

THE ARCHITECTS' JOURNAL



WEDNESDAY, AUGUST 14, 1929

THE WESTMINSTER ABBEY TABLEAU VIVANT

> "*. . . . . It may save a good deal of correspondence if I correct a misapprehension at once. Mr. Tapper's scheme does not 'entail' the cutting of a new entrance through the Islip Chapel. That was not part of Mr. Tapper's plan, and is not essential to it. It was suggested afterwards and is being carefully considered like other suggestions. There are good arguments both for and against it. But the point is that it is not true to say that the scheme 'entails' it or involves it. The entrance to the sacristy would in any case be by the existing door on the east side of the North Transept, and while an exit into the Islip Chapel would obviously have advantages the scheme does not depend upon that.*"
>
> —THE DEAN OF WESTMINSTER in a letter to *The Times*, August 8.

THE Westminster Abbey sacristy controversy has fed columns of Press these months past. It has become one of the bread-and-butter controversies, which but to mention in print releases new falls of correspondence, like the paper snow in *Uncle Tom's Cabin*.

As a controversy, it is not without a gleam of the heroic. On the one hand stands a body of exalted personages, their features expressive of every form of righteous disapproval; on the other, the Dean of Westminster, alone and defiant. The man in the street looks on and wonders what it is all about. He looks at the exalted ones and wonders whether *they* know what it is all about. He looks at the Dean, and thinks, at least, that he sees a man who knows what *he* is about.

Such was the *tableau vivant*, which for some little time, and with little change, had taken up its position before the Abbey walls. Rather dull, perhaps, but stay—new and coloured light falls upon the group, and there is action "off"!

It was assumed that this odious sacristy scheme would destroy a beautiful sixteenth-century window, the only one of its kind in the Abbey; and that the window once removed would be for ever lost. Appeared, therefore, upon the scene Mr. Raymond Henniker-Heaton, late Director of and Art Adviser to the Museum of Worcester, Mass., U.S.A., and asked if he might buy the window to take home to Massachusetts.

Now, if Mr. Henniker-Heaton had asked for a group of marble statuary from the transept, or even a limb or two of projecting marble, there could hardly be the same opposition, which, even in the man in the street, arises to forbid the sale of such really choice fragments of national heritage as the Islip Chapel window. Had the thought occurred to the Abbey authorities they might, of course, have freely bestowed the window to the church in America, provided that it was impossible to use it elsewhere in the building, and provided, too, that the sacristy scheme really did involve its destruction; but Westminster Abbey is not yet for sale, as a whole or in lots—and the rich for once must be sent empty away.

Quite apart from our natural repugnance to a commercial transaction in Abbey windows, Mr. Raymond Henniker-Heaton should have realized that he had not only projected himself into the midst of a very impressive and dignified controversy, but that, had his mission been successfully accomplished, he would have deprived the contesting parties of their bone of contention, leaving them gazing at a hole in the wall.

Therefore was doubt swept away by the Dean with a fair answer to Mr. Henniker-Heaton, and the scene has once more congealed into its original tableau, until such time as the noise of hammer and chisel will drown the measured beat of paragraphs and the noble group be carried aloft to the heaven of its exalted righteousness.

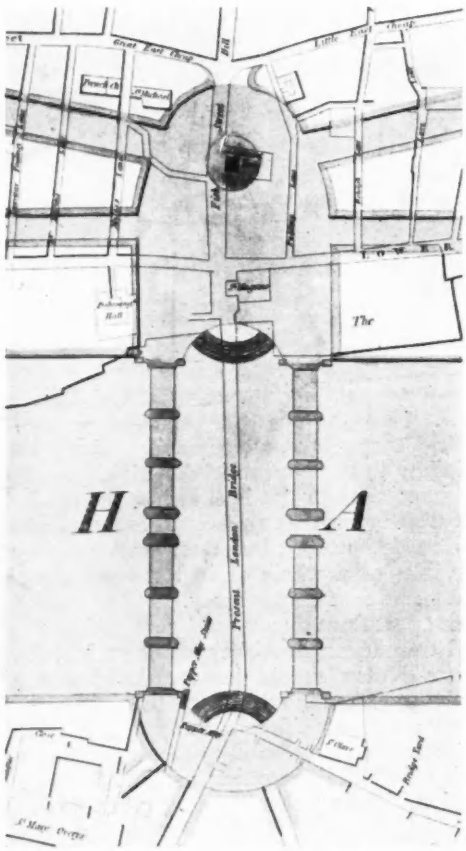


Sectional view of George Dance's scheme for building a twinned London Bridge: for plan, see below. It will be noted that a massive flight of steps was projected to the water's edge on either bank of the river.

NEWS & TOPICS

HOW LONDON BRIDGE WAS EVOLVED

IT should interest a generation that is to be responsible for so much bridge-building to know something of the trials and errors from out of which London Bridge was born, in 1800 or thereabout. A select committee that investigated the question of improving the Port of London issued with its report several schemes for rebuilding London Bridge that were remarkable achievements, considering the date of their inception. The most interesting of these is by George Dance, and shows, in the plan and section here reproduced, twin bridges opening from wide piazzas or circuses on either bank, combined with a very business-like arrangement of converging streets. Between the bridges fine sweeps of steps lead down to the river.



Plan of George Dance's proposal of twin bridges at London Bridge, considered by the select committee for the improvement of the Port of London in the first years of the nineteenth century.

*

It is hard to say whether or not Dance intended that the bridges should be one-way streets, with " roundabouts " at either end. That would be the obvious explanation of the plan today, and one that might with profit be applied to Waterloo Bridge if the Aldwych Quadrant were allowed to play its proper function in the street plan. Dance's bridges are too close together to allow of the navigation of barges carried on the ebb or flow tides, but a much greater distance would separate the bridge that would serve the free arm of Aldwych down-stream from Waterloo Bridge.

*

MR. EPSTEIN ON " DAY " AND " NIGHT "

The correspondence centreing on Mr. Epstein's sculptures for the Underground building which appeared in *The Manchester Guardian* was more interesting than such word contests are prone to be. It was marred only by the jaundiced strictures of Sir Reginald Blomfield, fierce enemy to all who wander from the strictly classic fold. At this time, when so many words of praise and blame have been written, comes an interview with Mr. Epstein, wherein, with simple phrase and in quiet tone, he explains as much as he can consciously express of the works that have so recently left him. He tells how the " Day " group was done first, cut in the strong sunlight. " Night," coming after, he placed on the shady side of the building, so that the carving is deeper and stronger than in the other. He tells how he tried to work for an architectural effect, making his groups pyramidal like the mass of the building. As to his " seeking out beauty," as he was told to do, or " wallowing in primeval slime," as one accused him of doing, I will quote his own words, which should hang before the eyes of anyone who takes up a pen to write of æsthetics :—

*

" THE CULT OF UGLINESS "

" . . . is it not time that we gave a rest to this talk about the cult of ugliness? Nobody seeks for ugliness. I am not sure that anyone seeks for beauty. The artist seeks to express himself, and if he is sufficiently an artist he finds beauty in his way of expressing himself. But he does not set out ' to seek for beauty.' That is not how beauty is found."

*

OXFORD AS A POTENTIAL AIRCRAFT TARGET

Objections have been raised to the establishment of an aerodrome outside Oxford on the grounds that it will form a provocative target for enemy aircraft in time of war, and inevitably draw fire upon the town adjacent. This

argument raises the question of how civil and military aerodromes may be differentiated; and also, if they form as easy targets as they are assumed to do, whether they should be tolerated close to any concentration of houses. So far as the vulnerability of Oxford is concerned, I can imagine Sir William Morris's motor works offering as good a target as anything under sun or moon; and the enemy airman might fairly be excused the error of regarding the town as his obvious objective, an industrial centre.

*

POSSIBLE AMENDMENTS TO TOWN PLANNING LAW

The directions in which Mr. Arthur Greenwood, the new Minister of Health, is being asked to consider amendments in the existing law as regards town planning and regional planning by the Greater London Regional Planning Committee and others, are likely to be interesting. It is hoped to extend the town planning powers of local authorities to areas already built over, on the lines recommended by Mr. Neville Chamberlain and his colleagues on the Unhealthy Areas Committee in 1921. Difficulties with regard to compensation may, however, prevent adequate legislation on this subject. As already one quarter of England is included in the schemes of Regional Advisory Committees, Mr. Greenwood is considering whether power may be given to Joint Town Planning Committees to prepare outline plans, which, when adopted, would have statutory authority. In order to reserve open spaces around growing industrial centres, consideration is being taken as to whether power should be given to planning authorities for the allocation of areas for building development and the prohibition of building in reserved areas. No decision has yet been arrived at, but Mr. Greenwood is known to be extremely sympathetic towards legislation on these lines.

*

EUROPE'S LARGEST GRAIN SILO

The accompanying photograph shows an exterior view of what is at present the largest grain silo to be completed in Europe; and this week's frontispiece is to show it at an early stage of construction. It has been built to the order of the Compagnie des Docks et Entrepôts de Marseille by the S.A. d'Entreprises Froment Clavier of Paris, a well-known French firm of public contractors which specializes in silo construction. This granary, situated on the Quai d'Arenc at Marseilles, has a capacity of 200,000 quintals of corn. It is constructed entirely of reinforced concrete. In an architectural sense it certainly compares most favourably with the majority of the larger American and Canadian silos. Le Corbusier has remarked that you can tell by the lines of any given piece of machinery whether it is of French, German, English, or American manufacture. There is no doubt that the lines of a silo as monumental and impressive as this could only be French. Its monolithic simplicity is perfectly expressive of its storage function, while the columnar form of the forty-eight component bins is as logical as it is dignified. The danger of monotony, or too close an approach to the conventional outline of a temple, has been avoided by placing the tower-like warehouse asymmetrically. The orderly manner in which the two-decked landing stages on the water-front have been designed deserves special praise.

*

CONTROL OF DESIGN AT POOLE

Interesting experiments in the control of design are to be made by the Poole Corporation. Under the town planning scheme that has just been approved by the Ministry of Health, the village of Canford, close to Canford School, is to be specially protected. This is known as a model village, and, in order that it may not be disfigured by unsightly villas or bungalows, in the future plans and elevations will have to be submitted to an advisory committee. Meanwhile an endeavour is also to be made to prevent Poole Harbour, one of the beauties of Dorsetshire, from being spoilt by ugly boatyards. These are usually disfiguring, built around a steel skeleton covered with boards, and roofed with a sheet of corrugated iron. Suggested regulations are being drawn up to control the design of boatyards. It is proposed that they should have concrete walls, covered with cream stucco, and have a red Italian roof. Poles on the Venetian pattern may also be used for mooring.

*

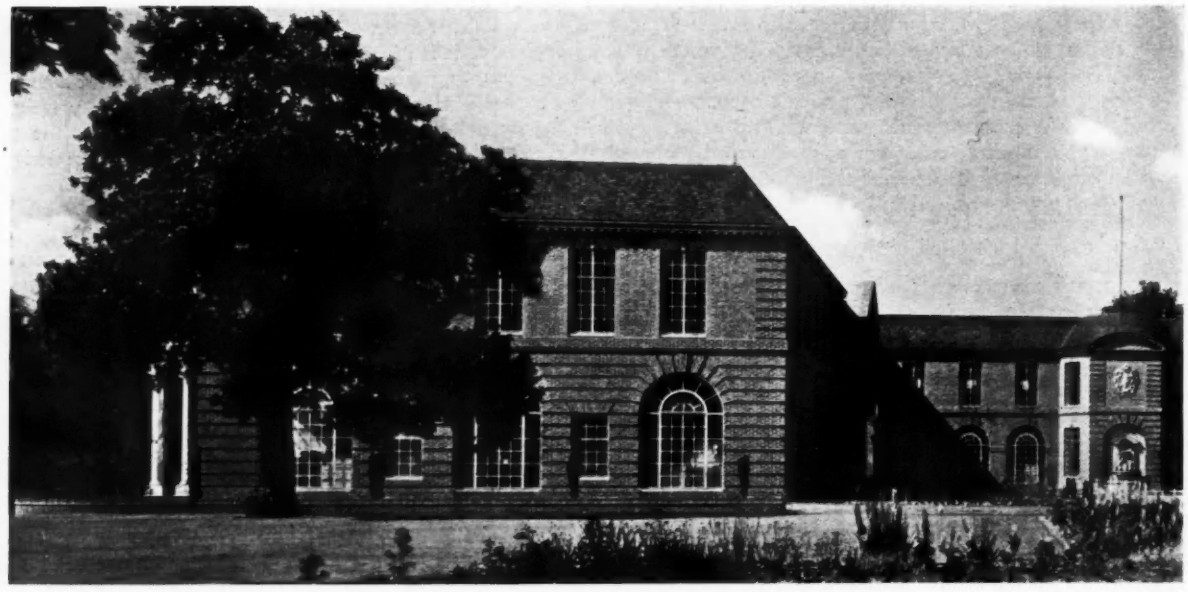
TRUE BUT FABULOUS

Here is a very pleasant story to set beside the tales of tribulation and the warnings of pitfalls that beset the life of architects. The scene is set in the dining-room of a newly-completed house. The architect, the builder, and their wives, and workmen, to the number of two score, are assembled to present to the client and his wife an oak window-seat, designed by the architect, made by workmen on the job, and paid for by all those engaged upon the building of the house, as an expression of their happiness in being able to work well for a good client. Speeches are made, gifts pass in return from client to architect and builder, before the workmen, with their wives and sweethearts, move off to the village hall to dance together.

ASTRAGAL



A 48-bin grain silo on the dock-side at Marseilles. It is built entirely of reinforced concrete, and has a capacity of 200,000 quintals of grain.



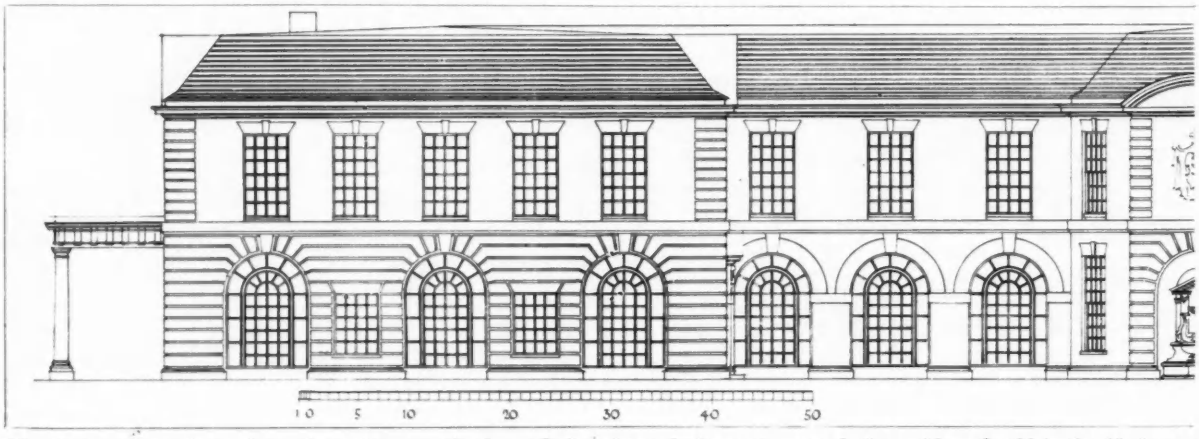


WILLIAM HEINEMANN, LIMITED : A FACTORY

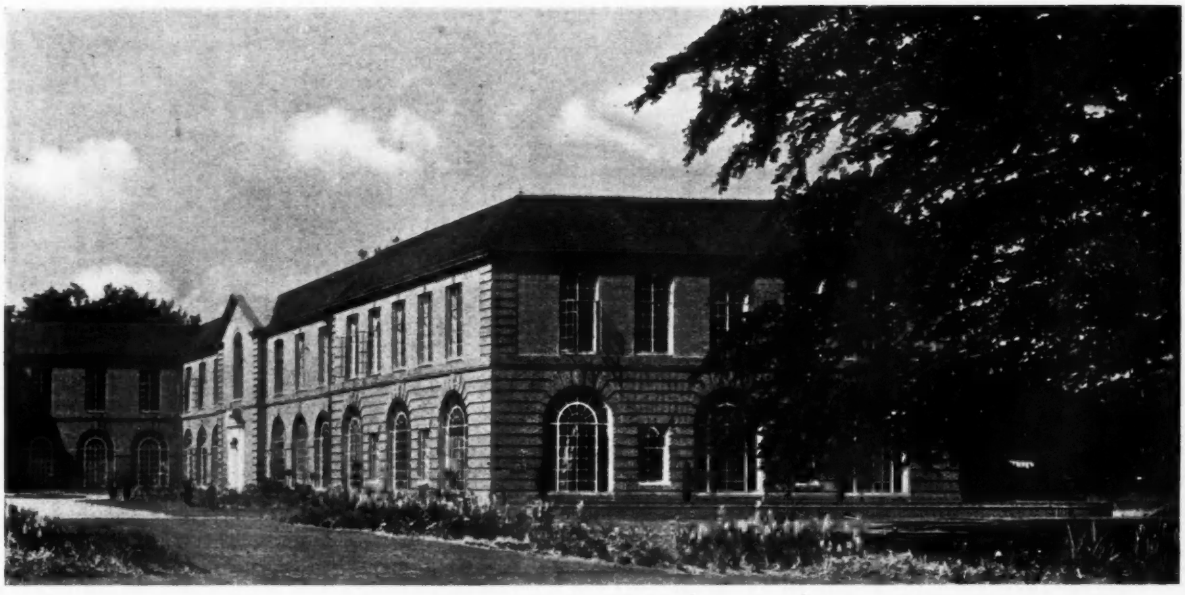
DESIGNED BY LORD GERALD

THE Windmill Press is modelled on the Garden City Press, Long Island, New York, which belongs to Messrs. Doubleday, Doran & Co. Mr. F. N. Doubleday wished his employees to work in ideal country conditions, and it is due to his initiative that both presses have been built. A woodland site of 30 acres was purchased at Kingswood, Surrey, and the architects were instructed to give their design the character of a collegiate institution rather than a factory. At the same time the building was to be adequately lit for its purpose and reasonably economical. It is, in fact, brilliantly lit; and the cost works out at 11d. per foot cube.

Including magazines, an average of 5,000 volumes are printed and bound every day in the ground floor of the building, about 200 people being employed. The stock-room, designed to hold more than a million books, and the offices are on the first floor. There are also canteens for the workpeople and a hospital. The greatest care has been taken with the layout of the gardens surrounding the

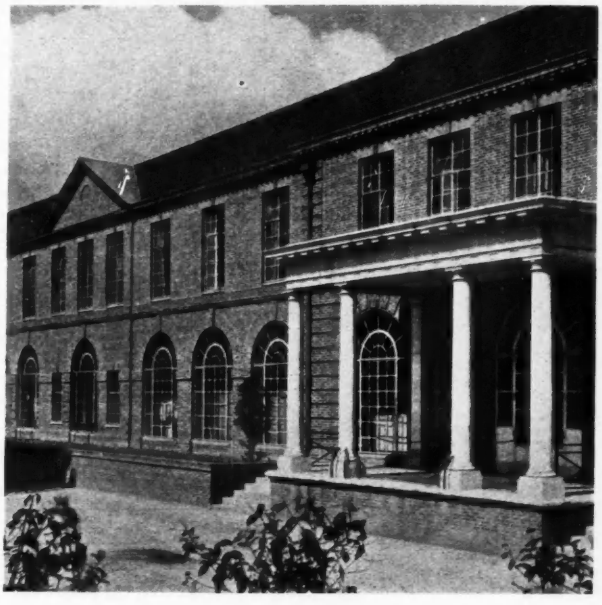


The larger illustrations above show the general view of the Windmill Press, from the main approach drive leading to the internal forecourt, around three sides of which the blocks are disposed, and the architects' corresponding elevation drawing. Of



IN ARCADY : NEW PRESS AND OFFICES

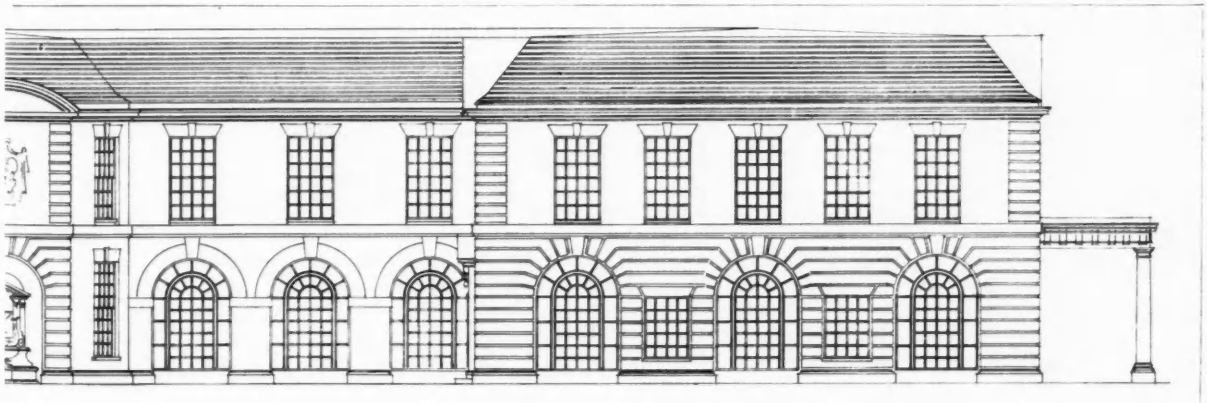
WELLESLEY AND TRENWITH WILLS



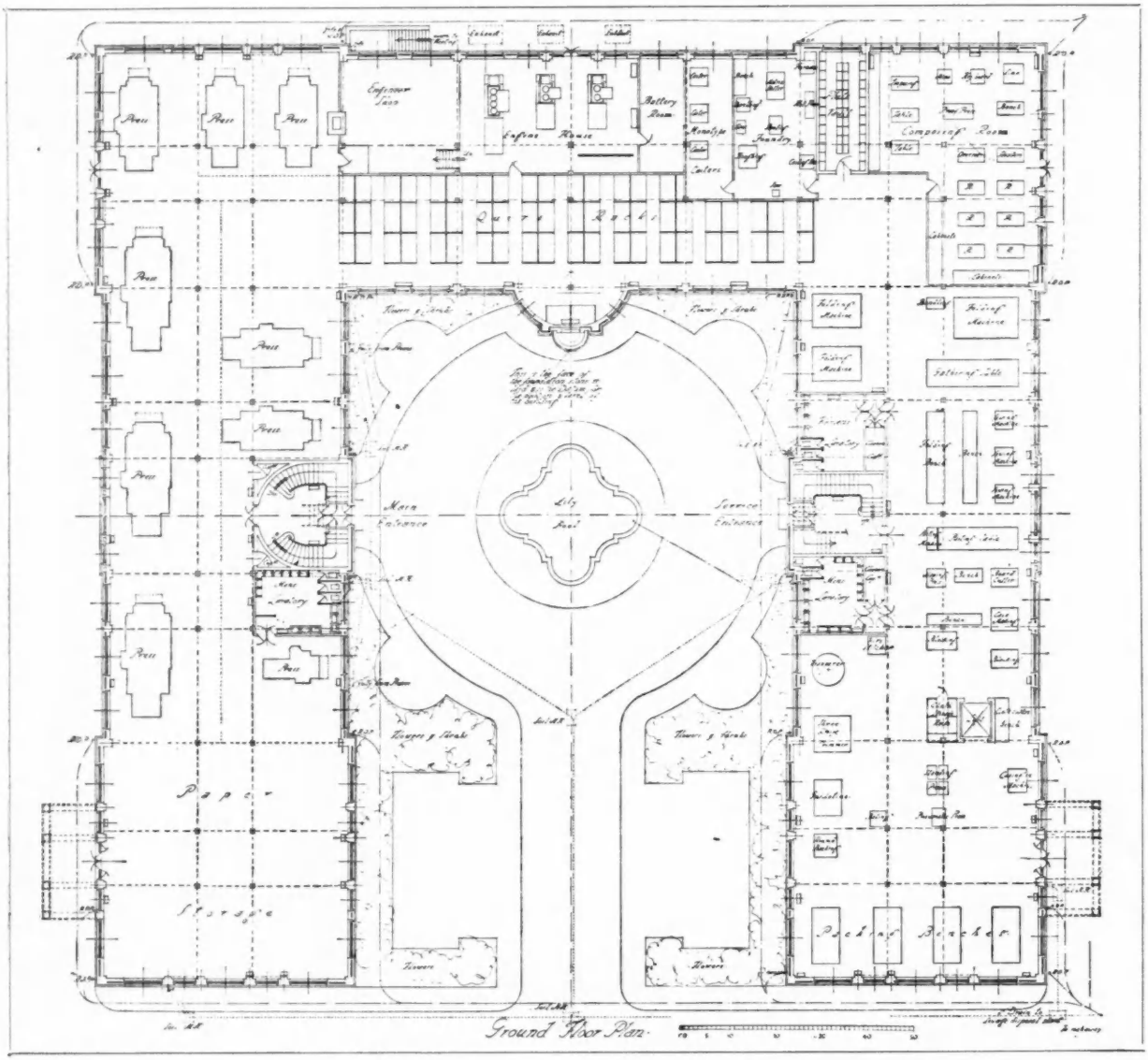
building and the preservation of the woodland beyond. Heating and hot-water supplies are obtained from oil-fired boilers in order to avoid smoke.

The building is faced with 2-in. bricks, the lower story, the piers on the angles, and the cornice being of rather purple tone, while the "filling" of the first floor is of selected mixed reds. The dressings to the windows are in selected bright reds. The roof is covered with asphalt on the flats and with hand-made sand-faced tiles on the raking portions. The two main doorways in the forecourt are of wood painted white with carved wood brackets.

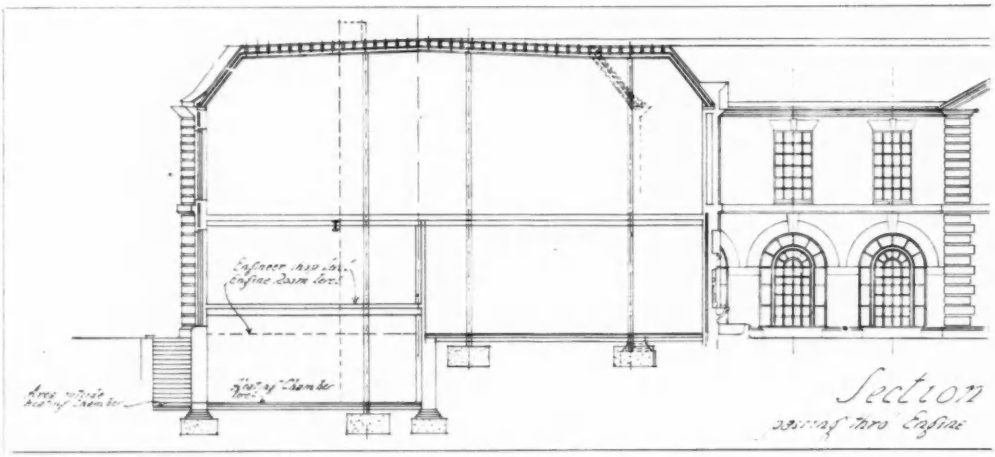
The inner skin and foundations, built in white sand lime bricks, are pointed fair face, except on the main stair case and in the private offices, which are plastered. The whole of the presses, stockrooms, general offices, etc., are simply spray-painted with cream water paint, while all the woodwork and ironwork, inside and out, is painted bright blue. The first floor is constructed of filler joists and concrete, and is of extra strength in the stockrooms.



the smaller views, that on the left is of the central decorative feature of the courtyard front (for details, see pages 234-5); that on the right, of the goods receipt platform on an outer flank of the building, arranged for the unloading of lorries on a direct level.

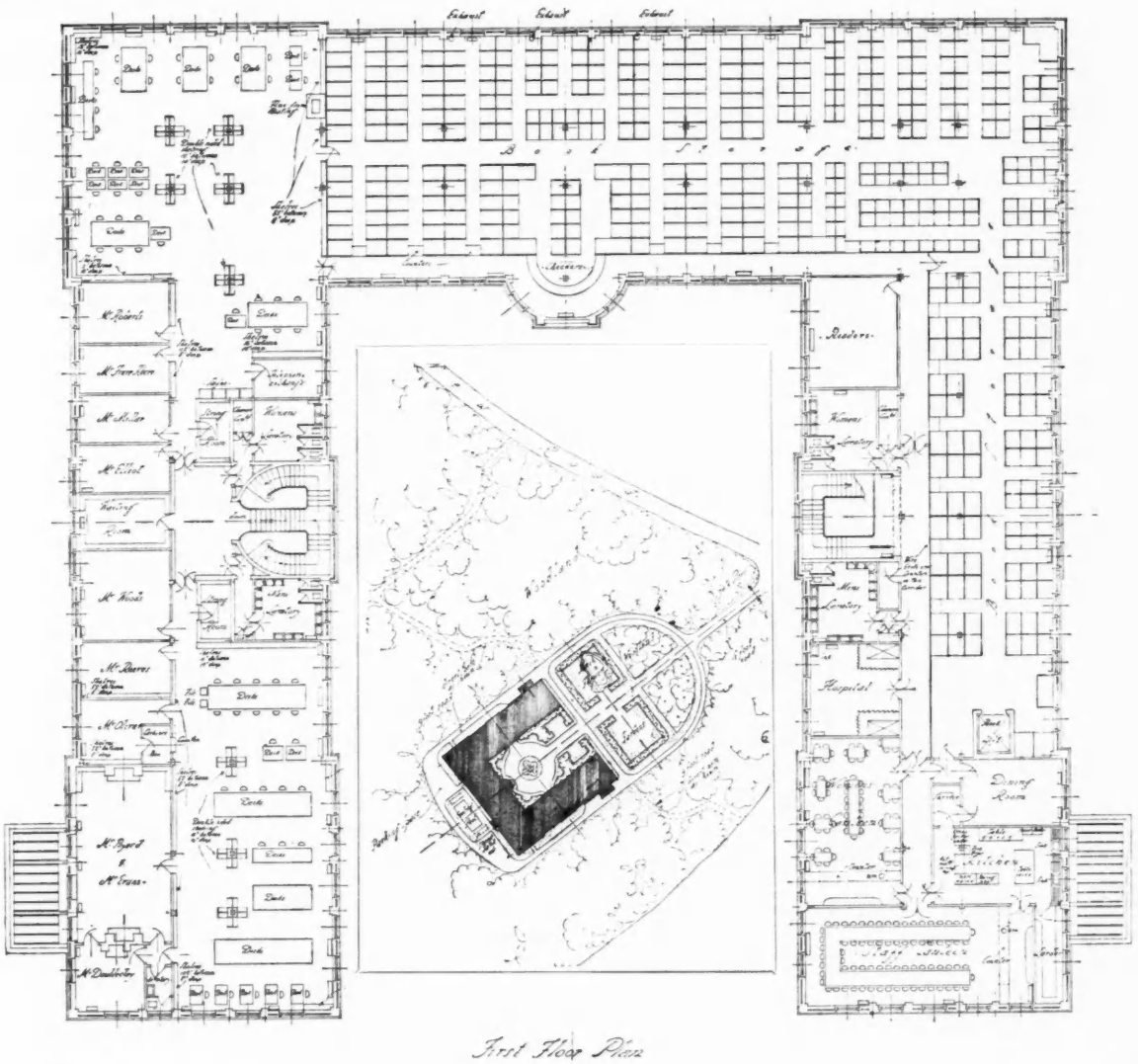


The architects' plan drawing of the ground floor, to which are confined the manufacturing operations. The sequence of production begins at the bottom left-hand corner, where materials are delivered on a raised platform, and continues round the building to the right-hand bottom corner, whence bound books and magazines are dispatched from a similar bay. The layout of the forecourt in garden beds, a lily pool, etc., is also shown.

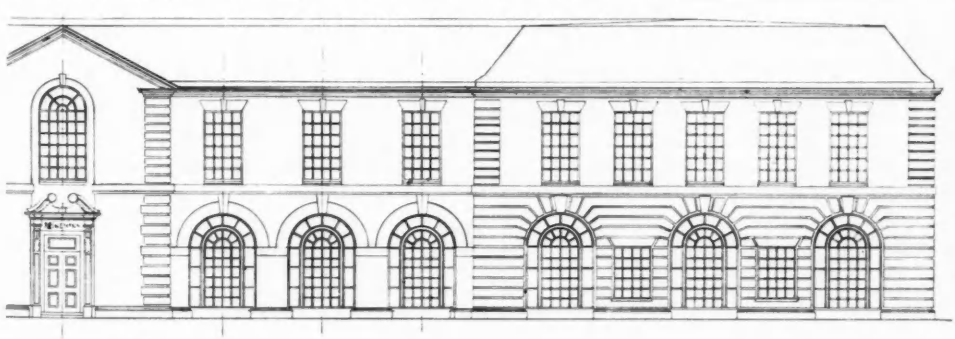


Windmill Press, Kingswood, Surrey.]

The sectional part of this drawing is particularly interesting as showing the arrangement of the heating chamber, in which oil-fired furnaces are installed and also one of the reinforcing girders introduced



First Floor Plan



Plan of the first floor, with key-plan on a much reduced scale, of the layout of the building, surrounded by gardens and woodland (inset). In addition to office accommodation on a liberal scale, there are a stockroom, canteens, a hospital, and a directors' dining-room. The arrangement of the staircase, immediately within the main office entrance in the left wing, imparts special character to the interior of the building (see page 237).

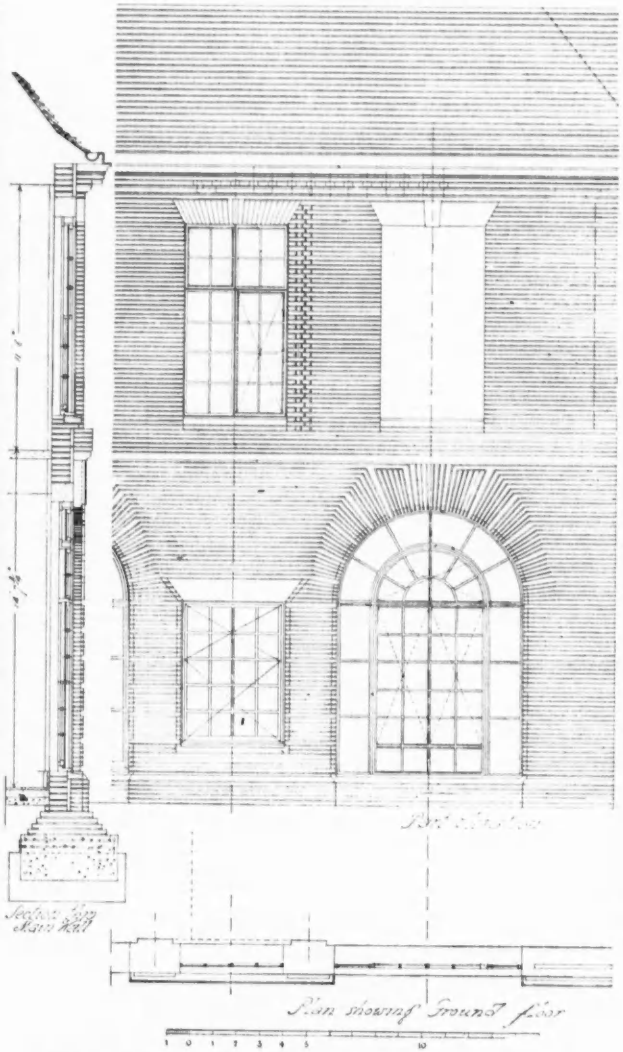
[*By Lord Gerald Wellesley and Trenwith Wills.*

to give additional stability to the floor of the first story in view of its utilization as a store. This book-store accommodates more than a million volumes, the great weight of which called for special structural measures.



Windmill Press, Kingswood, Surrey.]

The fountain, with dolphins, that forms the central feature to the forecourt. Beneath the lower trough is a foundation stone bearing an inscription recording that it was laid by Mr. F. W. Doubleday.

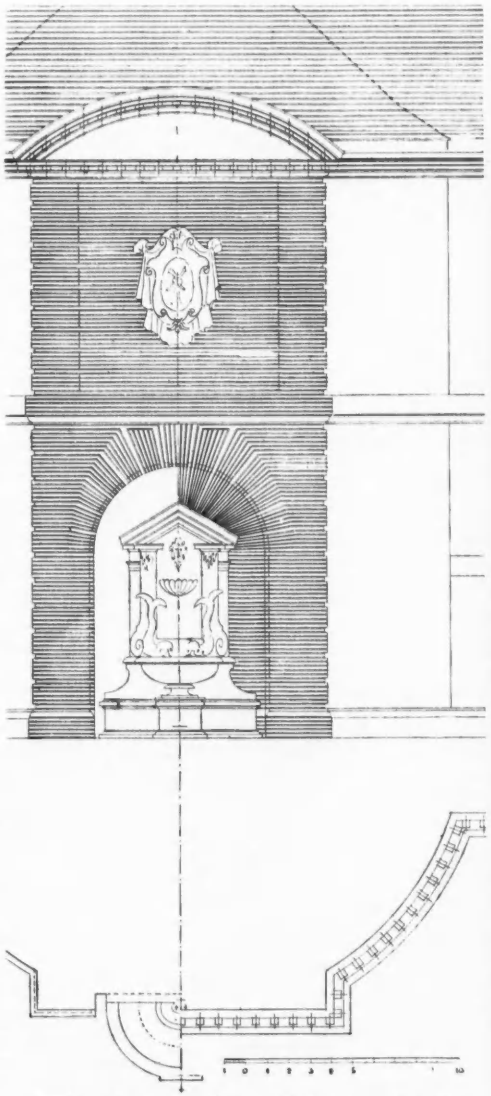


This architects' detail drawing of the typical arrangement of windows in one of the outer flanking walls should be compared with the photograph given below.

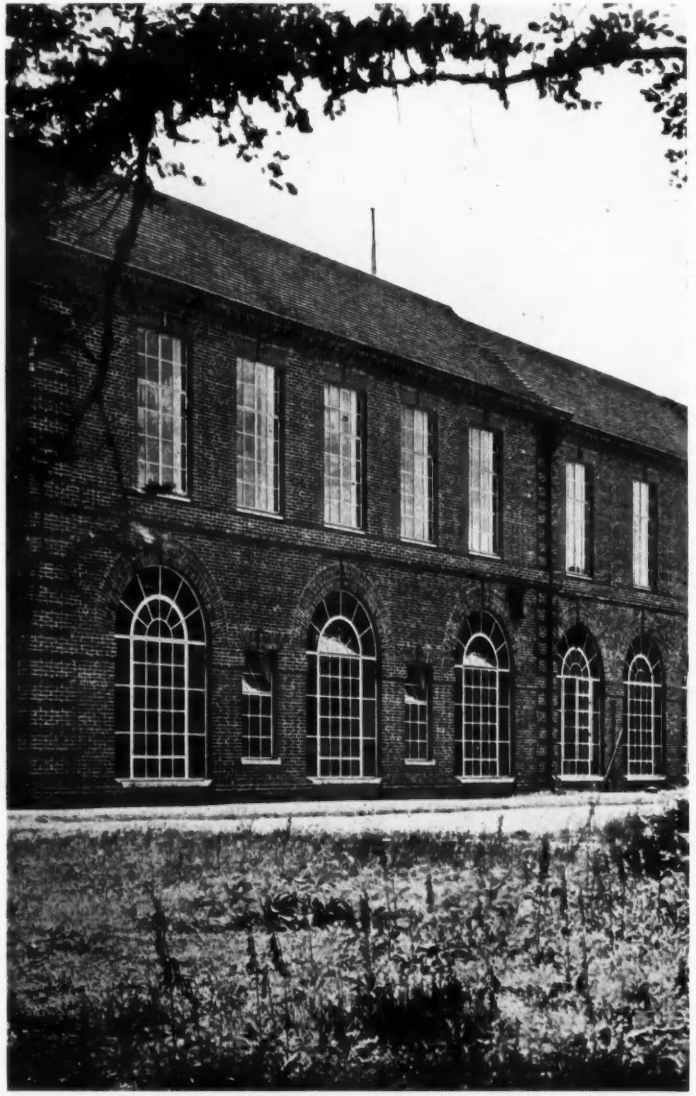


[By Lord Gerald Wellesley and Trenwith Wills.

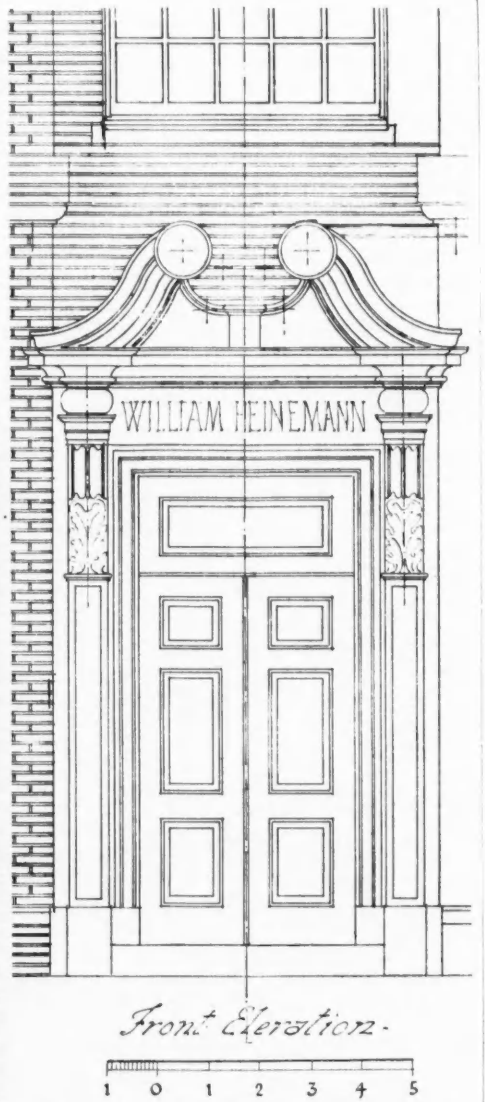
As will be seen from the ground-floor plan, this door, giving entrance to the factory in the right wing overlooking the forecourt, has a fellow immediately facing it in the left wing.



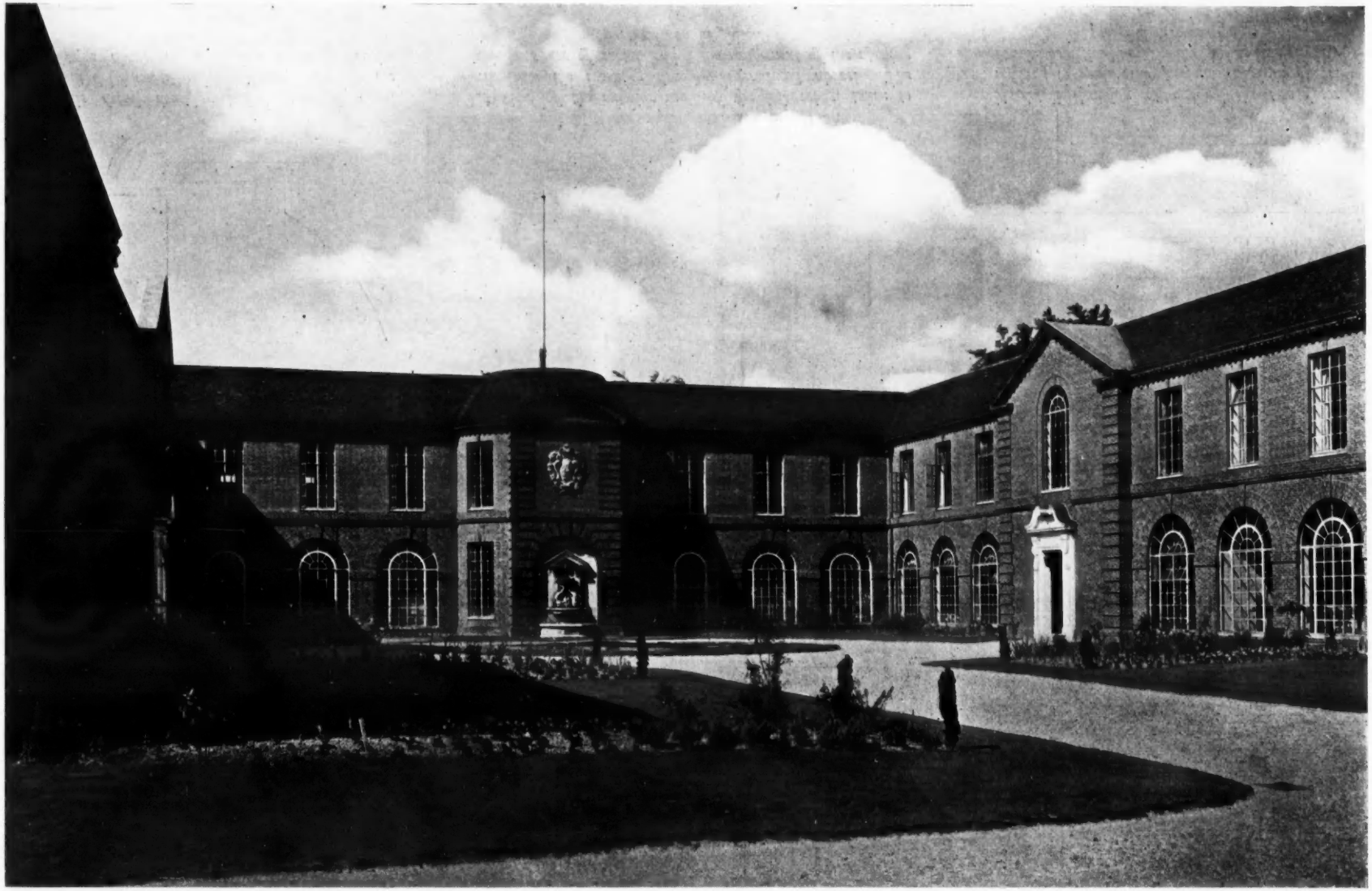
This detail drawing includes the fountain, with dolphins, illustrated above, and also the plaque above it, with the windmill device associated with the firm.



A view of the exterior wall of the left wing, taken to illustrate the working drawing reproduced above. The windows are of metal and the arrangement of the opening portions can be followed.



A detail drawing of one of the two doors referred to under the photograph given above. It will be noticed that the design has been slightly modified in execution.



Windmill Press, Kingswood, Surrey.] [*By Lord Gerald Wellesley and Trenwith Wills.*

The architects were instructed to give their designs the character of a collegiate institution rather than a factory. Actually the whole of the ground floor, entered through the porch on the right, is devoted to the purposes of book-producing machinery. The offices are on the first floor in the wing on the left, served by the main entrance seen, and by the staircase illustrated on the facing page. Most of the remaining space on this floor is allocated to the storage of books, but room is found in the right wing for canteens and kitchens, etc.



A general view of the main staircase, leading to the offices on the first floor, showing the decorative effect produced by the curved form of the balusters.



Looking towards the stairway, through the open archway on the first-floor landing shown in the adjoining photograph. The main office corridor runs to right and left.



Windmill Press, Kingswood, Surrey.] [*By Lord Gerald Wellesley and Trenwith Wills.*

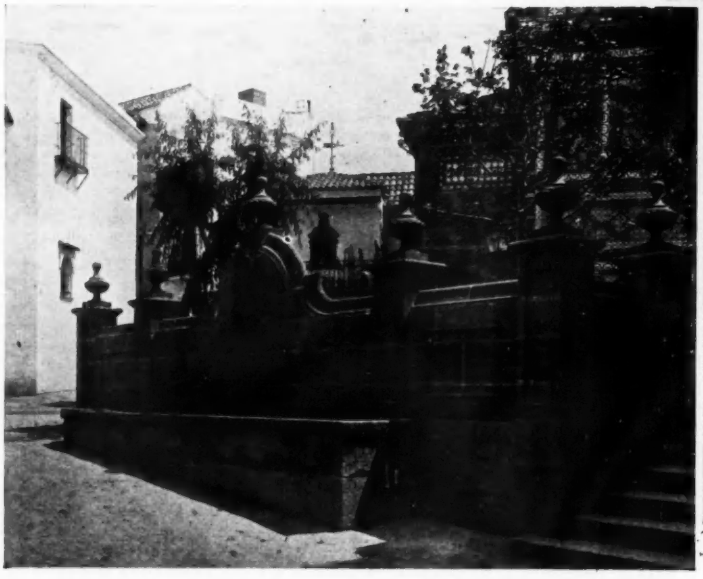
The directors' room has permanently fitted bookshelves on either side of the fireplace shown, which faces another, with a doorway on either side of it. The door seen in the wall on the right gives access to the main corridor, and a spacious open office.



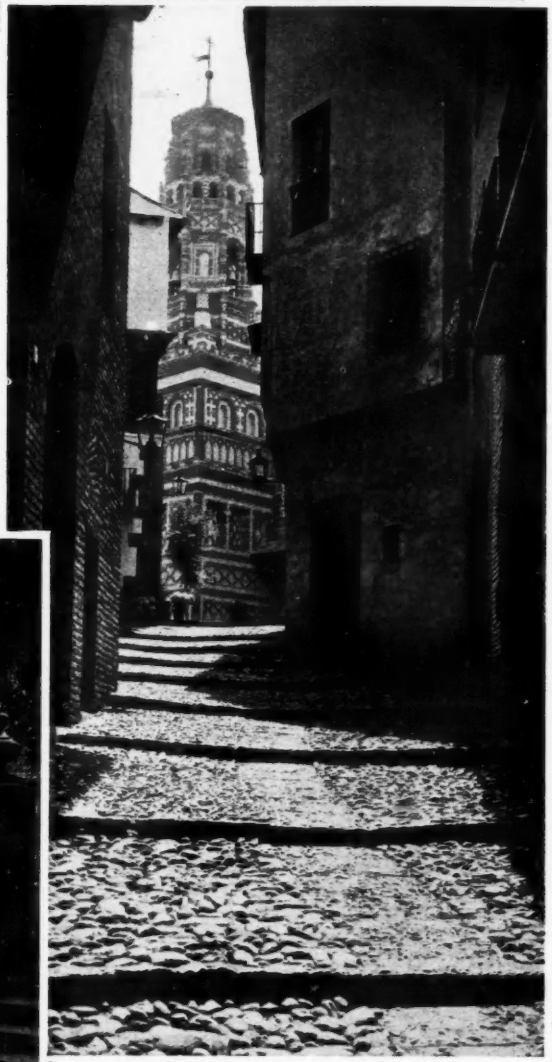
The Exhibition Entrance, showing, at the end of the vista, the National Palace, housing the exhibition of Spanish art.

BARCELONA INTERNATIONAL EXHIBITION 1929

Spain is still a great colonizing power in the world, and, although no longer politically in control, her spirit and tradition guide the young and vigorous nations of the New World of South America. The first International Exhibition since the Great War shows that this spirit is still alive and vigorous. The great mountain park of Montjuich, just outside Barcelona, has been converted into terraces, gardens, and promenades encircling permanent exhibition buildings of exceptional scale and grandeur. The modern section contains the industrial exhibits covering agriculture, textiles, electricity, applied art, the cinema,



A fountain in the Spanish Town, where tournaments, historical pageants, etc., will be held during the course of the exhibition.



A glimpse of a twisting street in the Spanish Town, a reconstruction of historical buildings and picturesque corners, renewing the glory of the past.



The Plaza de la Fuente Magica (Magic Fountain), taken from the terraces of Montjuich overlooking the city.



The Hall of the Cinema contains a fine picture theatre.

and foreign products; the historical, a magnificent collection of Spanish art, the Spanish Mission House, and the Spanish Town. L. F. E.



One of the great courts, showing the Hall of the Universe. Throughout the exhibition the illuminations are wonderful, particularly those of the National Palace, the first building presented to the entering visitor's eye.



ELEVATION TO ABBEY LANE



ELEVATION TO BLACKBIRD ROAD



SOUTH ELEVATION

ABBEY BAKERIES, LEICESTER

Note on Roof

The steelwork of the north-light roof is of special design, its main support consisting of lattice girders, following the slope of the north-side glazing. The south slope in each case is carried by raking beams from the top of one girder to the bottom of that adjacent, and these are braced with diagonal members so as to form an efficient girder on the south slope to support the inclination of the main north-slope lattice girders. By this means the whole space is kept clear of any steel members crossing between valleys and ridges, the intervals between which are therefore made available for occupation by machinery or other structures of a greater height than the distance from floor to valleys.

Abbey Bakeries, Leicester.] [*By Stockdale, Harrison and Sons.*

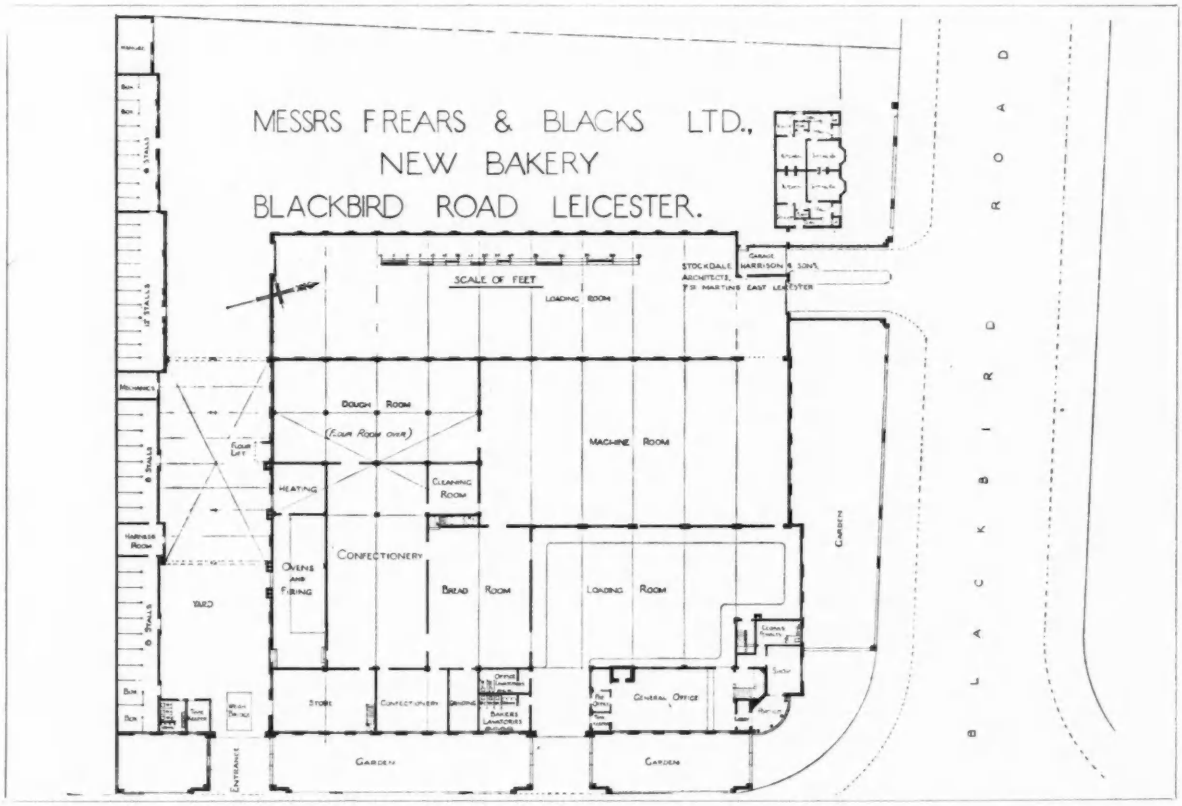
The bakehouse premises, illustrated on this and the following two pages, occupy a rectangular corner site, at the junction of Abbey and Blackbird Lanes, Leicester, facing the old Abbey. Interesting details of the construction of the roof are given in the above note attached to the architects' drawings.

MODERN BREAD BAKEHOUSES AT LEICESTER

DESIGNED BY STOCKDALE, HARRISON & SONS



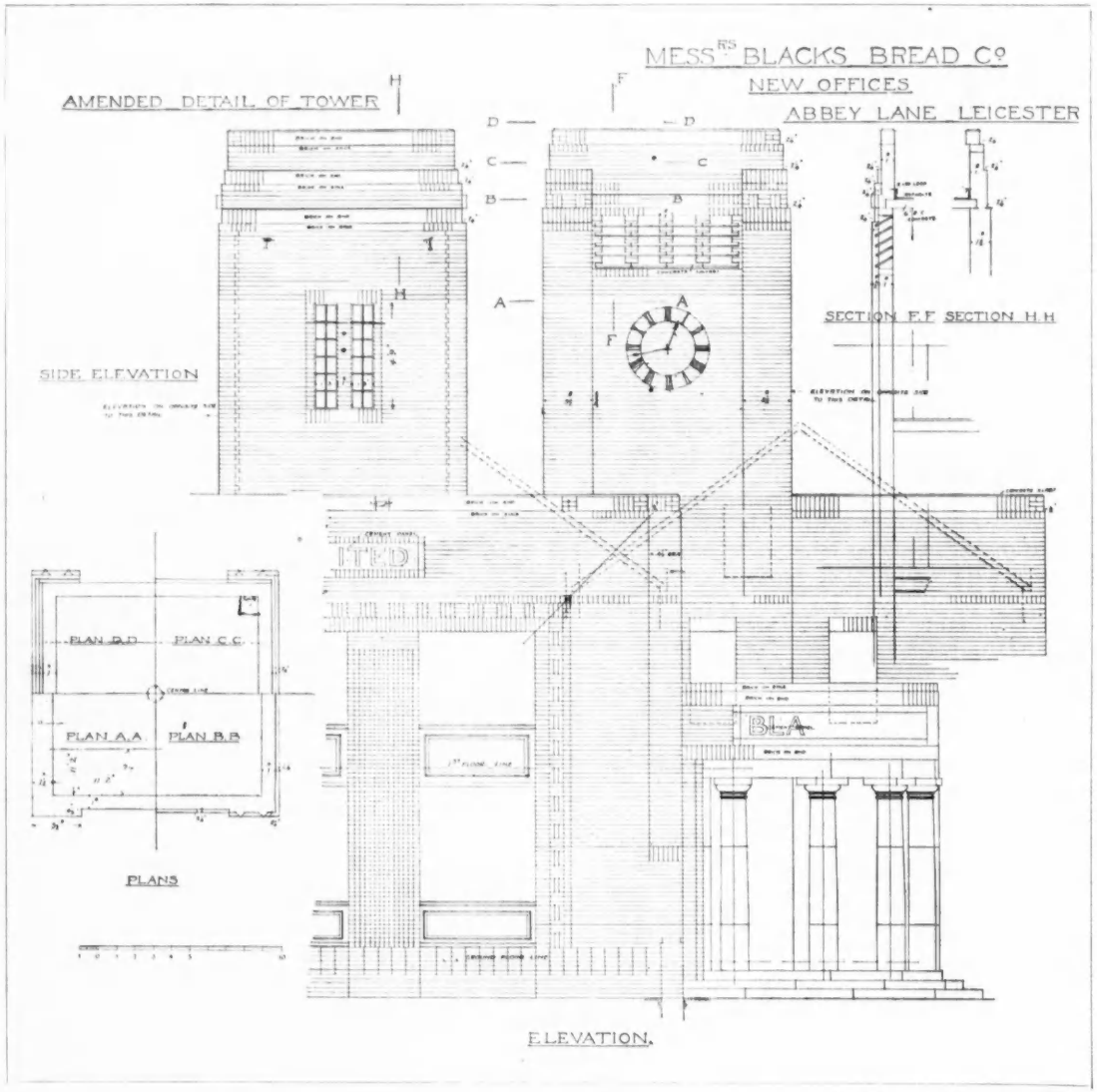
In the general view from Abbey Lane, the quadrant portico of the main entrance to the shop and offices, as well as the clock tower, plays an important part. On the extreme left is an indication of the old Abbey wall; on the right, with frontage to Blackbird Lane, a pair of semi-detached cottages, owned by the bakery.



The architects' general plan provides for two-story offices, etc., and a single-story factory, housing appliances for the manufacture of bread on a large scale. The scheme includes store space, stabling, garage, and a pair of cottages.

The bakehouse premises, illustrated on this and the following two pages, occupy a rectangular corner site, at the junction of Abbey and Blackbird Lanes, Leicester, facing the old Abbey. Interesting details of the construction of the roof are given in the above note attached to the architects' drawings.





Abbey Bakeries, Leicester.] [*By Stockdale, Harrison and Sons.*

A photograph, and the architects' detailed drawings, of the clock tower, with skeleton dials, and surrounding features that occupy a prominent position near the angle of the site. The whole is carried out in brickwork, with artificial stone pillars to the portico and cement panels for the inscriptions.



ENGLISH PRECEDENT No. 77

CHURCH OF SAINT PETER AND PAUL, BLANDFORD FORUM, DORSET. (1732–9.)

A tower placed in the middle of the west front of a church broader than itself is apt to have disagreeable results architecturally; it confines the west doorway and windows within its own comparatively narrow breadth, it leaves a little bit of façade on each side that is hard to relate with it, and it interrupts the continuity of design.

In Blandford parish church, the illustration of which is from the south-west, Messrs. John and William Bastard, architects, have tried very ingeniously to avoid these defects by standing the western half of their tower upon a tall pedimented mass broad enough to give ample background to a beautiful composition of west door and window above it. Further, they have designed this mass in the noble scale of the church proper, and have reduced the scale of the tower details almost to that of the wooden architecture of eighteenth-century America.

In general the effect is good—though the idea is arbitrary. The pedimented mass looks unreal, the tower a little unexpected, its detail trivial. The wooden cupola and vane are of excellent contour and proportion.

—[H. S. GOODHART-RENDEL]

The whole is carried out in brickwork, with artificial stone pillars to the portico and cement panels for the inscriptions.

DAMP IN HOUSES: ii

From Condensation

In the first part of this article, published last week, the author considered dampness arising from the soil, from penetration, and from new walls and plaster. Below, he deals with what is often the most troublesome problem of all: dampness due to atmospheric conditions.

Air nearly always contains a proportion of moisture, the amount varying with the climatic conditions. Further, the percentage of moisture which can actually be retained by the air varies very considerably with the temperature of the air itself; for example, at 30° C. the air can contain without precipitation six times the amount of moisture that air at zero could contain, and even three times the amount that air at 10° C. could contain.

Now it follows from this that if a damp-laden air at a certain temperature strikes a surface at a lesser temperature a precipitation of damp will be given off, and moisture will appear on that surface. If the surface is porous it will absorb, at any rate, a proportion of that damp, but if it is non-porous the moisture will stream down on the surface.

The most exaggerated example of this is steam, which, in its colloquial sense, is warm air laden with damp to the utmost of its capacity. Take, therefore, steam from a hot bath; as warm air rises its first points of impact will be the ceiling and the upper parts of the walls; and we all know how these particular surfaces in a bathroom run with water, especially if there are cold weather conditions, and still more so if there is a flat roof over the bathroom.

The maximum of condensation will be reached if that flat roof happens to be of concrete, and there are two or three external walls exposed to the extreme cold of the outside atmosphere.

From this exaggerated case most condensation troubles can be deduced. Such materials as glass, concrete or iron are great conductors of temperature, and if the cold outside is more powerful than the heat inside they will remain cold and, being non-absorbent, will tend to precipitate any damp in the atmosphere. Hence the enormous condensation on shop or railway-carriage windows, concrete walls and ceilings and steel-sheeted buildings.

The air of the room may be warm, and this can contain a good proportion of moisture, but as it passes over the cold surfaces it will give off the damp it contains.

According to Herr Richard Flügge, the German engineer, there is one other cause of condensation, little appreciated, and that is that a thin porous wall, which has absorbed as much damp as it can hold from the outside, becomes, so to speak, cold and clammy, and has the similar effect of presenting a cold internal surface on which to condense the damp of the inner atmosphere, being at the same time incapable of absorbing moisture so given off. Thus, frequently, condensation and saturation work together, and it is sometimes difficult to ascertain where one begins and the other leaves off.

As we live in a climate in which damp air and rheumatism prevail, it behoves us to combat both saturation and condensation as far as possible. Saturation can be overcome by thick walls, hollow walls, or walls protected by stucco, tile hanging, or weatherboarding. Condensation is similarly lessened by all these precautions, which not only prevent saturation but have, in most cases, a certain insulating effect, thus preventing the coldness of the outer surface from being directly conducted to the inner. (I except from this the possible interpretation of a thick concrete or granite wall, both of which might resist saturation, but would produce condensation.)

In Scotland where, no doubt, condensation is even worse than in England, it is the usual custom to batten and counterbatten the inner face of all external walls before plastering, and this again has a good insulating effect. There are also on the market various cork or fibre materials which allow a certain amount of absorption, and at the same time keep in themselves a fairly constant temperature.

On the question of absorption there is one more point. It is a fact that most materials capable of absorption are good insulating materials, and therefore reduce the amount of condensation; but, given that the insulation is there, I doubt whether the fact that the moisture is absorbed into the surface and is slowly evaporated back into the atmosphere is any healthier than if the moisture is precipitated on the surface and is similarly reabsorbed into the atmosphere.

I am thinking at the moment of a painted surface as compared with a wallpaper; under similar conditions the paper would absorb a certain amount of condensation without showing it, while the painted wall might show a slight film of damp, but I do not think it would be any the less healthy on that account; in fact, the possibilities are that it is the healthier condition of the two, for in that case the moisture may be seen and dried off with a cloth, and even if left alone will be dispersed much quicker, leaving a dry wall.

DELTA

R.I.B.A. COUNCIL MEETING

Following are notes from the minutes of the last meeting of the R.I.B.A.:

The R.I.B.A. London Architecture Medal Jury for the session 1929-1930 has been appointed as follows:

The President R.I.B.A. (ex-officio); Chairman of the Art Standing Committee (ex-officio); Professor S. D. Adshead, Lord Monkbretton, Lord Riddell, Sir Gilbert Scott, Messrs. H. Chalton Bradshaw, H. S. Goodhart-Rendel, Louis de Soissons, James Bone, C. S. Jagger, George Lansbury, M.P.

The Council have made a contribution of £25 to the Ralph Knott Memorial Fund. A grant has been made of £50 to the R.W.A. School of Architecture, Bristol, for the year 1929.

The annual grant of £50 to the Franco-British Union of Architects for the year 1929 has been renewed. The annual grant of £3 3s. to the British School at Rome, Faculty of Archæology, for the year 1929 has also been renewed.

The following ex-members were reinstated: Messrs. Henry E. Budden (Fellow), H. Percy Brentnall (Associate).

The following probationers were elected as students of the R.I.B.A.:

Allen, W. H.
Barnes, J. W. H.
Barrow, T. J. D.
Bland, K. W.
Cardwell, J. J.
Chard, F. V. S.
Connolly, H.
Cooper, A. W.
Cowie, M. J. H.
Darbyshire, L.
Dawbarn, C. Y.
Doe, H. E.
East, T. W.
Edgar, N.
Edmunds, R. M.
Elgar, S.
Fairless, C. L.
Forbes, H. J.
Gardham, H. E.
Graham, K.
Harrison, G. H.
Hassell, G. F.
Hawkard, C.
Heath, C. P.
Honeywell, F. W.
Jackson, C. H.
Kain, W. C.
Lowe, W. L.
Mastin, H.
Midgley, R.
M'Intyre, D.
Mollison, W.
Oatley, J. W.
Polson, F. M.
Powys, I.
Rex, L. H.
Robinson, A.
Sidebottom, J. G.
Simmons, C. H.
Smith, C. B.
Smith, W. C. B.
Steel, A. J.
Stewart, A. A.
Stuart, D. L.
Thompson, J. S.
Thompson, W.
Toy, C. G.
Turner, A.
Turner, J. W.
Tweddell, N.
Walker, R.
Waters, A. B.
Watson, R. P.
Williams, C. P.
Wood, C.
Woolley, F. E.
Wright, F. W.
Wright, R. H.

SHADOW PROJECTION

A Holiday Course for Architectural Students: xi

BY JOHN M. HOLMES

For this last lesson of the course the subject selected is a dome and colonnade. The complex shadows of such forms require for elucidation not only a general diagram, but two detail drawings of larger scale.

Diagrams 21-23: Shades and Shadows of a Dome, with Colonnade

DOME FORM WITH COLONNADE

DIAGRAM 21

This form involves methods similar to those applied in diagram 15 (instalment vii).

Elevation Shades and Shadows on the Form

The dividing lines on all cylinders are found by lines at 45 deg. tangent to the respective plan circles. The dividing line on the dome is a part of an ellipse and is obtained as in diagram 10 (instalment vi). The shadow of the circular edges N and O, etc., is projected from chosen points in the plan and elevation through the appropriate plan circles.

Construction lines are shown for two points in the shadow of the abacus of one column on to the column surface at points D and E (in plan and elevation) with their shadows at DS and ES in the elevation.

Construction lines are also shown for two points in the shadow line of the abacus on to the inner cylindrical surface at G and F in plan and elevation, with their shadows at FS and GS in the elevation.

The scale of this diagram prevents full demonstration of construction lines at this part, and reference should be made to diagram 22, where the method of obtaining both these shadows and that of the abacus on to the inner cylindrical surface is clearly shown on a larger scale.

Plan Shades and Shadows on the Form

The ellipse of shade on the plan of the dome is produced as in diagram 10 (instalment vi).

The curve LS-KS in plan is the shadow of a part of the upper edge of the cylinder Z in elevation. It would be a part of a true circle, of the same radius as the cylinder, if the shadow surface were horizontal. As the shadow falls on the curved surface of the dome it is necessary to make three slice lines —1, 2, and 3, in plan and elevation— and to project points K, L, and M on to their respective slice lines to produce shadow points KS, LS, and MS. The method is shown at larger scale in diagram 23.

The shadows of parts of the curved edges N and O in elevation are cast on the horizontal circular surface P. They consist of parts of true circles with centres at CN and CO in plan.

The centres for circles of shadow on the different steps in the lower part of the form are projected in a similar way.

Shadows on Background and Foreground

Points in the dividing line of the form in plan and elevation are projected through the *XY* line. Those parts of the dividing line which cast their shadow on the form can play no part in the shadow outline on the background or foreground. It should be remembered that in this case certain cast shadows on the form are hidden in plan by the projecting cornice. The shadows of circular parts of the form consist of a series of ellipses on the background which may be constructed, as in diagram 9 (instalment v), with centres at C^1, C^2, C^3, C^4, and C^5, and of portions of true circles in the plan with centres at C^6 and C^7, etc. See also diagram 15 (instalment vii).

The correctness of the drawing of ellipses and circles may be tested by direct projection of a few points in the dividing line.

Points on the form are thus identified here with the shadow outline at Q and R, with shadows at QS and RS, and S and T, with shadow points in the plan at SS and TS. The latter points do not play a part in the shadow outline because they would occur as plan shadows in the surface marked A in the elevation.

The shadow of the abacus W in elevation is shown complete at WS in the plan foreground shadow in order to explain distortion.

SHADOW OF ABACUS AND COLUMN

DIAGRAM 22

(Supplementary to diagram 21)

The diagram shows the elevation and plan of a column with square abacus supporting a portion of curved entablature, the edge of which is shown in plan by the line AB, with shadows cast on to a curved surface shown in plan as the line CD.

Beginning at the top with the shadow of a portion of the edge of the curved entablature on to the abacus, the points F, G, and H in plan and elevation are projected to give shadow points at FS, GS, and HS.

In the lower edge of the abacus points indicated by J to K in plan and elevation are projected to give the curved shadow edge JS-KS on the column. The continuation of the lower edge of the abacus K to L when projected in plan and elevation produces the shadow edge KS-LS.

The vertical dividing line LS-M on the column is projected from the plan point MP, where a line at 45 deg. is tangent to the circle.

The shadow of the edge of the entablature AB on to the curved surface behind, viz., the line NO, is found by projecting chosen points P, Q, etc., in plan and elevation.

The shadow of the lower edge of the abacus L to HS in the elevation is found by projecting these points in plan and elevation on to the curved plan line CD and produces the shadow edge LS^2-HS^2.

The shadow of the lower edge of the abacus to the left of J in the elevation (i.e. R-S) is found at RS-SS. The left vertical edge of the abacus TR in the elevation casts its vertical shadow at TS-RS.

The remaining portion of the shadow of the abacus is found at TS-US. It is cast from the upper edge of the abacus TU in elevation and RT-U in plan.

The shadow of the rest of the abacus on the curved surface is here lightly sketched as it would appear if the entablature were removed. The completed shadow explains distortion of the required portion.

THE SHADOWS OF RIBS ON A DOME FORM

DIAGRAM 23

(Supplementary to diagram 21)

Elevation Shade and Shadows

The diagram shows the plan and elevation of a dome form with ribs

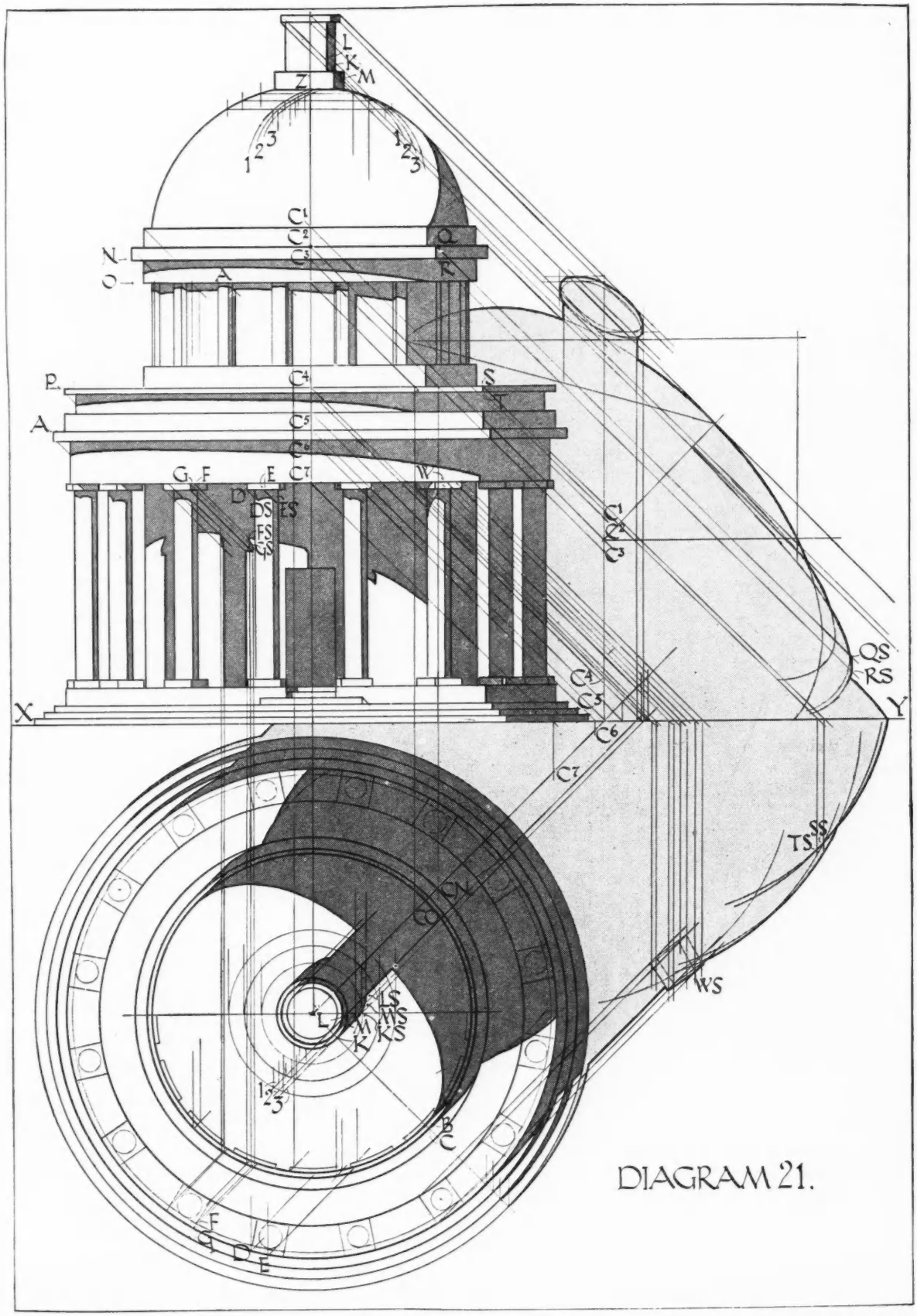
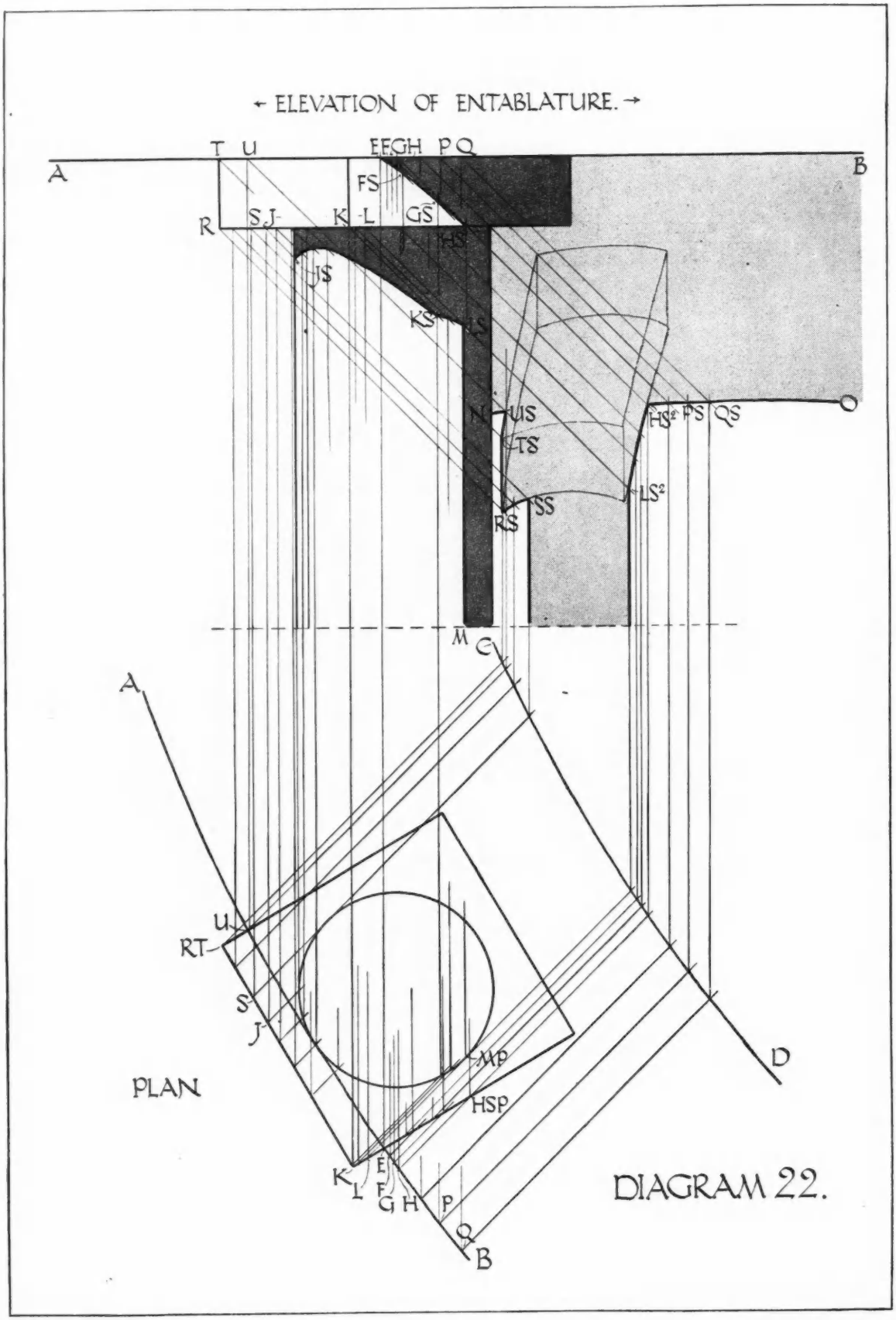


DIAGRAM 21.

Shadow Projection.] [*By John M. Holmes.*



Shadow Projection.] [*By John M. Holmes.*

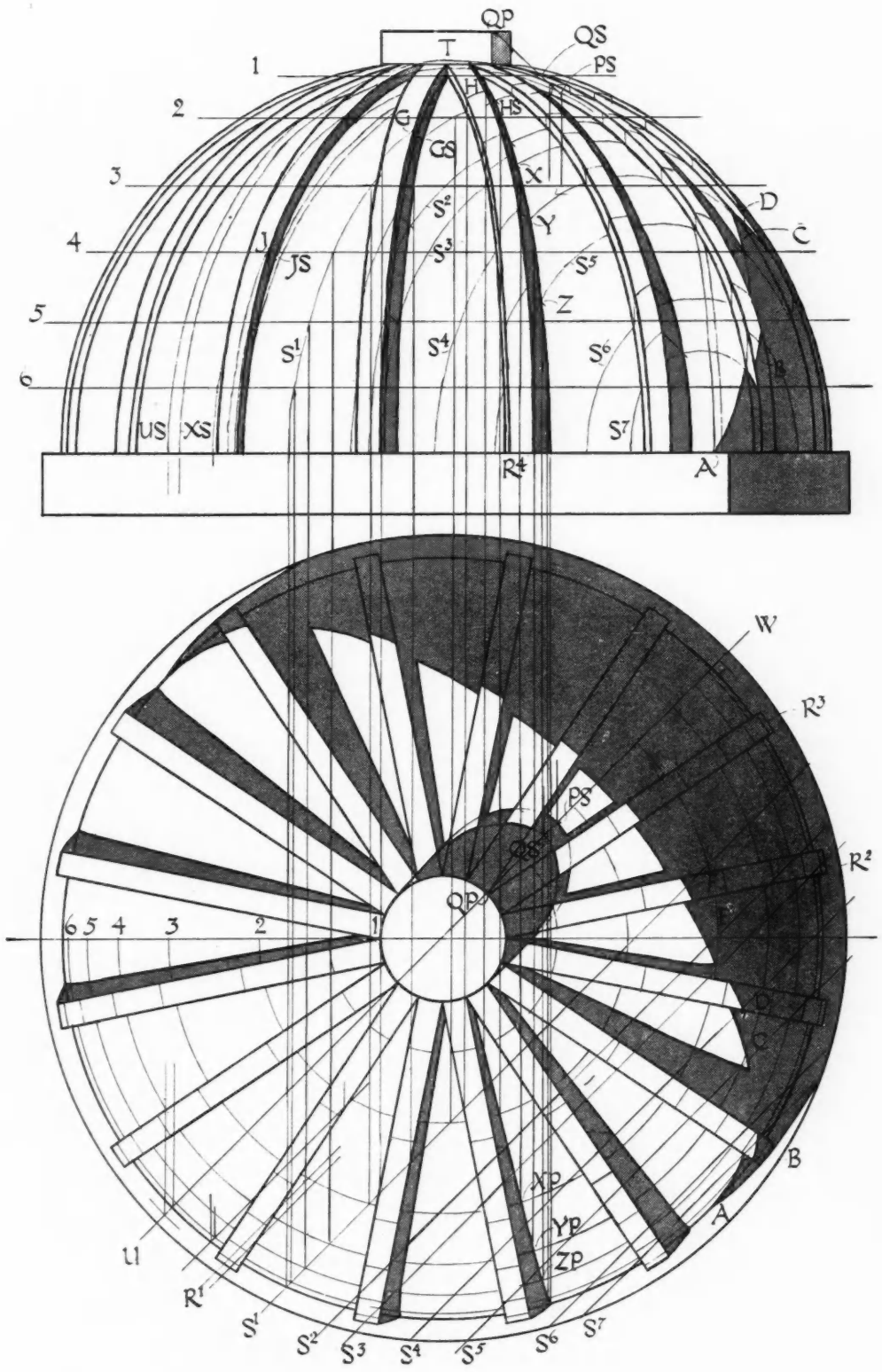
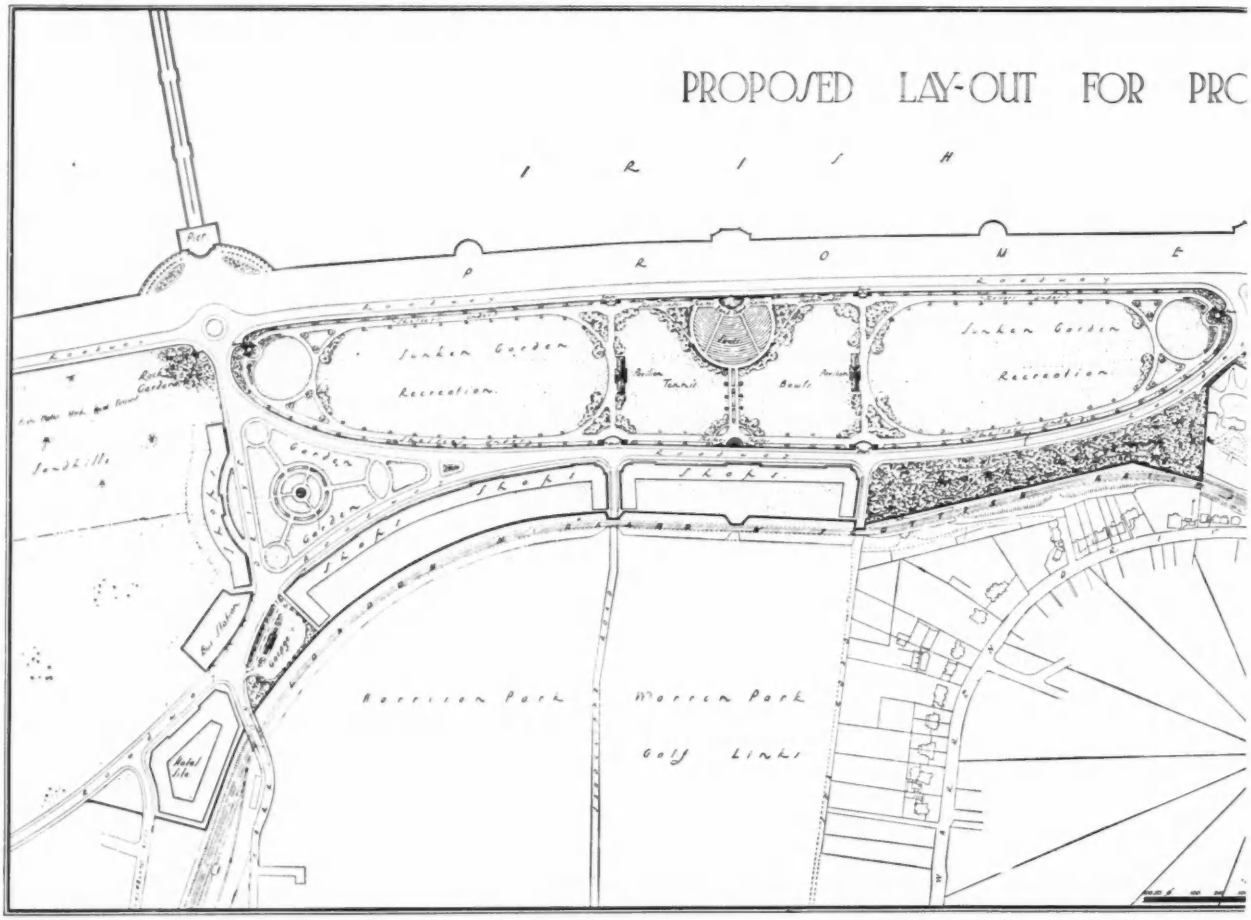


DIAGRAM 23.

Shadow Projection.] [*By John M. Holmes.*



Proposed lay-out for promenade and park, Wallasey. "To satisfy all demands and to weld together in one harmonious scheme of development the many constituent features of a sea front must

which are rectangular in cross-section. The shade line, indicated by letters A, B, C, D, etc., in plan and elevation on dome and ribs may be readily obtained as in diagram 10 (instalment vi).

The shadows of the ribs on the dome surface are found by drawing a convenient number of slice lines, marked S^1, S^2, S^3, etc., in plan and elevation. The construction lines for one slice only, that marked S^1 in plan and elevation, are shown. The horizontal slice circles are marked 1 to 6 in plan and elevation. (See also diagram 2, instalment iv.)

The slice line S^1 cuts the right edge of the two central ribs at points G and H respectively. The shadows of G and H on their respective slice lines are found at GS and HS by drawing lines at 45 deg. through G and H.

Each slice thus produces one point, with its shadow wherever the slice line cuts a rib.

In the case of the rib marked R^1 in plan the slice lines show that, although the right side of the rib is in shade, yet there will be no appreciable shadow cast on to the dome surface. See point J in elevation for example, with its shadow at JS.

Plan Shade and Shadows

The plan shadow of the upper circular edge of the small cylinder marked T in elevation is found on the dome and rib surfaces by making a series of slices in the same way. One slice is shown here, UW in plan, which gives a double elevation at US and XS in elevation, when projected upwards from the slice circles on rib and dome surface in plan.

A line at 45 deg. from point QP in elevation on to these two slice lines in elevation gives the shadow point QS on the rib surface and PS on the dome surface, when projected downwards to the plan of the slice line.

Other similar slices will show that the curved plan shadow of the circular edge of cylinder T consists of different parts of two ellipses, either of which forms the shadow edge according to whether the latter falls on rib surface or dome surface.

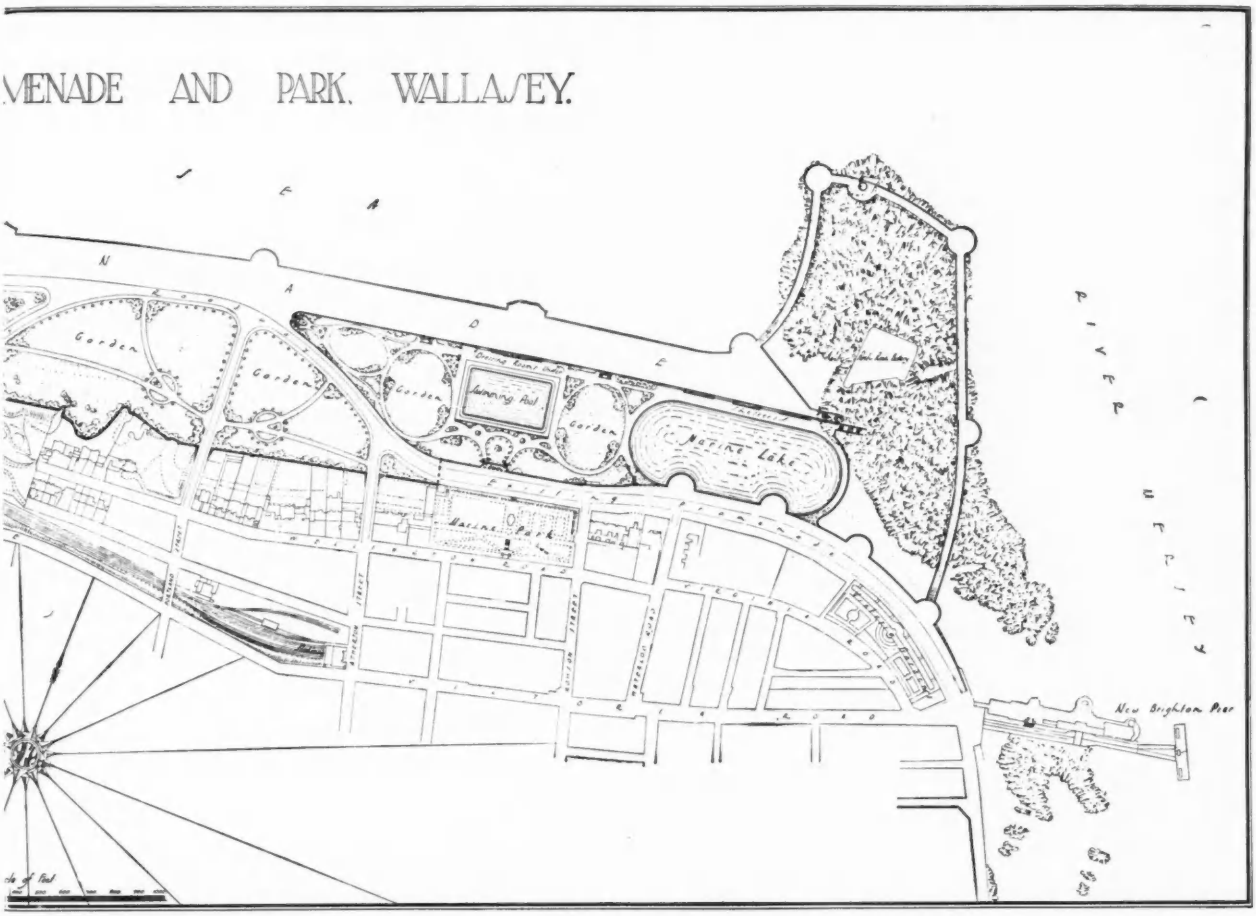
The plan shadows of ribs on the dome are obtained by projecting points where the elevation shadows cross slice circles 1, 2, 3, 4, etc., in elevation downwards on to the plan of these same circles.

Construction lines for the plan shadow of one rib only are shown. The points X, Y, and Z, on the rib marked R^4 in elevation, produce points XP, YP, and ZP in the plan shadow.

The plan shadows of ribs marked R^2 and R^3 in the plan are determined in exactly the same way as the shadows of other ribs, the slice lines being continued round the back of the form in elevation.

As plan shadows will be symmetrical on the diagonal marked UW in plan, it is only necessary to project those on one side. They are then reproduced mechanically on the other.

(*Concluded*)



be the aim of all in whose hands rests the future of a particular town." [*From* The Future Town Planning and Development of the County Borough of Wallasey.]

LITERATURE

THE FUTURE PLANNING AND DEVELOPMENT OF WALLASEY

Mr. Reginald Bruce has recently completed the preparation of a development plan and report for the county borough of Wallasey. Situated at the northern extremity of the Wirral Peninsula, this important region presents many problems which are intimately connected with the future growth of Liverpool and Birkenhead. For half a century New Brighton, Egremont, and Seacombe, which lie within the region, have provided natural outlets for residential expansion across the Mersey, and the ferries from Liverpool to these places are in constant use day and night. Of the total working population of 40,000 in Wallasey borough, nearly 18,000 work outside the borough—in Liverpool, Birkenhead, and elsewhere. In spite of this fact, Mr. Bruce considers that the region is so eminently suitable for residential and recreational purposes that " the allocation of any area to the predominant use of industry is not recommended." The arrangement of the report follows that of similar publications familiar to town planners, the first half being devoted to the survey of existing conditions, and the second half being in the nature of recommendations for future development. The author has made a most thorough survey of all matters topographical, meteorological, and those relating to occupation, public health, and open spaces. In his constructive proposals, which are comprehensive and imaginative, Mr. Bruce recommends the inclusion in a joint town planning scheme of a considerable area (partly built on) outside the borough boundaries. This appears essential to guide the haphazard development already begun. Like all seaside communities, there is the usual miscellaneous collection of shacks and bungalows —in this case situated at Moreton—and recommendations are put forward for their clearance and the rehousing of the occupants. A sound system of new roads is proposed for the undeveloped area in the west of the region, including three main arteries of the boulevard type, 120 ft. wide. No doubt the lines of some of the roads (Nos. 1 and 7, for instance) would be modified slightly during actual construction as they may require punctuation or bends to avoid dullness. But the author has visualized the need for well-designed road junctions, and he provides carefully worked-out designs for the most important ones, also for the arrangement of shopping centres and for the grouping of public buildings.

Some of the most valuable proposals are related to the reservation and planning of open spaces, which are ample and well disposed. It was a particularly happy idea to form a park strip along the line of the Birket Brook, which extends from the built-up area to the extreme western limit of the region and the open country; this should certainly be preserved. A detailed lay-out for the proposed sea front playgrounds is here illustrated. The Bidston golf course would be largely destroyed by the formation

of proposed roads, but land has been reserved elsewhere for the same purpose.

One turns with interest to other matters which concern the town planner, such as the provision of parking places and motor-coach stations, also the controversial question of the control of elevational design. Mr. Bruce deals very adequately with both these matters. We cannot, of course, produce fine architecture by legislative control; it is rather a question of education, of the architect and of the layman, particularly of local authorities. The method and measure of control is also one that cannot be adopted without proper safeguards for the imaginative designer. Nevertheless, the powers of control given to local authorities and their advisory art committees under the Town Planning Act require all possible publicity.

A word of congratulation is due to Mr. Bruce and his publishers for the general form and the illustrations of his report, especially for the clarity of the diagrams. W. HARDING THOMPSON

The Future Planning and Development of the County Borough of Wallasey. By Reginald Bruce, A.R.I.B.A., M.T.P.I., Wallasey Corporation Offices.

EMPIRE TIMBER RESOURCES

This handbook should wake us up if only to recognize that Empire timber is at present little more than a name. Of "softwood" 94 per cent. is drawn from foreign countries, and though we may feel that it is right to allow the foreigner to cut trees, and wrong of us to do so, since our woodlands are things of beauty, there comes a time when the best of our trees grow old and will fall of themselves. The fact is that all woods require periodical clearing, and arrangements should be made from the first to clear and re-plant.

To give an Imperial reason for their book the authors quote the following from *Britain's Industrial Future*: "That any expansion of the markets in the Empire oversea (other things being equal) is more advantageous to the United Kingdom than a corresponding development elsewhere, because the Empire oversea populations buy more British goods per head than the corresponding populations in other parts of the world." The wish for such an Empire exchange is the least thing for us all to cultivate, even if it does mean scratching out the words "Austrian" from many a standard specification.

At present, be it remembered, the United States of America send over seven million cubic feet of sawn oak timber against a meagre seventy-one thousand sent in from the whole Empire.

The authors are able to give a good mark to the Office of Works for showing the way in the direction of buying British Empire timber, and they quote the Under-Secretary of State for the Home Department, who announced in the House of Commons that "as a general rule only British Empire timber will be specified for carpenters' and joiners' work in Office of Works' building contracts."

WILLIAM HARVEY

Reports of the Imperial Economic Committee. Tenth Report: Timber. Presented by the Secretary of State for Dominion Affairs to Parliament by Command of His Majesty. August 1928. His Majesty's Stationery Office. Price 9d.



Hants and Dorset Motor Services Garage, Poole. Designed by James Allner. Accommodation is provided for ten omnibuses. The building is executed in brick, with the plinth and surround to the doorway of unglazed grey terra-cotta. The inner architrave is of dull, surface green, glazed faience. (*See also page 255.*)

LAW REPORTS

FORESHORE AND FERRY RIGHTS

The Bournemouth and Swanage Motor Road and Ferry Co. v. *Harvey and Sons and Tom Davis. Chancery Division. Before Mr. Justice Luxmoore*

Interesting issues were raised by this action, in which the Bournemouth and Swanage Motor Road and Ferry Company claimed a declaration that Messrs. Harvey and Sons and Mr. Tom Davis had no right to land passengers on their (the plaintiffs') landing-stage in Poole Harbour at South Haven Point, Studland, Dorset, except on payment to the plaintiffs of the tolls and dues authorized by the Bournemouth-Swanage Motor Boat and Ferry Act, 1923.

Mr. Grant, K.C., for plaintiffs, said that before they came to South Haven Point in 1923 there was no road or track to the ferry and no landing-stage. Casual ferrying across Poole Harbour was going on and passengers were landed at various points on the foreshore by means of a small movable platform. Early this year that privilege was withdrawn by the Bankes Estate trustees, who owned the foreshore. The defendants then began to invade the landing-stage erected by the plaintiffs under their private Act of Parliament, and claimed that there was a public right of way over it.

Lord Halsbury, K.C., for defendants, contended that on the true construction of the Act there was a King's highway formed across Poole Harbour between Bournemouth and Swanage which the public had a right to use, and that the plaintiffs' slipway occupied the actual site of what had been a public right of way from time immemorial.

His lordship, in giving judgment, said he came to the conclusion that the only right conferred by the Act in respect of the stage was a right to use it as such on payment of the appropriate ferry tolls, and there was no exception in favour of foot passengers. It was further argued that the landing-stage constituted an obstruction to a public right of way, and that therefore foot passengers could pass over it without payment, but it was quite impossible on the evidence to find that any such public right of way existed. The foreshore was private property, and the public had no general rights of

landing on it, and the landing-stage was not an unlawful obstruction because it had been erected under the authority of an Act of Parliament. It followed, therefore, that the defendants had failed to establish any right to use the landing-stage without payment of toll and that the plaintiffs' company were entitled to the relief which they sought—namely, a declaration, an ancillary injunction, and an inquiry as to the damage caused by the defendants' wrongful acts.

His lordship further held that a counter-claim by the defendants for a declaration of certain rights failed, and he dismissed it with costs. He refused any suspension of operation of the injunction.

ANCIENT LIGHTS IN MANCHESTER

Jauffred and Gariel, and James Collinge, Ltd., v. *Joseph Sunlight. Before Mr. Courthope Wilson, K.C., Vice-Chancellor of the County Palatine of Lancaster*

This was an action to restrain a threatened obstruction of light to Oversea House, Quay Street, Manchester, by the erection by defendant of a building on the opposite side.

Mr. Cyril Atkinson, K.C., M.P., and Mr. C. E. R. Abbott appeared for the plaintiffs, and Sir Herbert Cunliffe, K.C., and Mr. H. S. Barker, for the defendant.

In giving judgment, the vice-chancellor said it was admitted that plaintiffs' windows were ancient lights, and defendant said that sufficient light for ordinary business purposes would be left to plaintiffs' windows, having regard to the quantum of light to be expected in such a locality; further, that, if the light left was insufficient, the deficiency could be made good by plaintiffs allowing their front windows to be enlarged.

The plaintiffs, Jauffred and Gariel, were the owners of Oversea House, and they had let the whole building to the plaintiffs, James Collinge, Ltd., on a lease for ten years from June 1928. James Collinge, Ltd., had sublet the first floor to Jauffred and Gariel, and the second floor separately, occupying the semi-basement themselves as an office. Quay Street was 54 ft. wide, and the defendant's proposed building immediately opposite the windows complained about, was intended to rise to a cornice 86 ft. above the pavement, and then, with certain steps back, to 121 ft.—more than twice the width of Quay Street. It would have a frontage 2½ times that of plaintiffs' building. There was to be a pylon at one part of the frontage 98 ft. high.

Applying the 45 degree rule, the deprivation of light was said to be so substantial as to cause a nuisance to occupants of the ground floor, as they would not have sufficient light to enable them to carry on their business. It was occupied as an examination room for goods to be shipped abroad. He held that no extraordinary degree of light was or could be claimed for this purpose, but natural light was essential in regard to the colours. Artificial light would be quite useless.

The basement would certainly be insufficiently lighted if the defendant's building were erected.

The first-floor rooms were used as a calico printers' sale-room, clerks' office and private office. In the sale-room printed fabrics were exhibited on easels for customers to choose. In his opinion insufficient light would be left for these rooms.

With regard to the second floor, the injury would not be so great, but they would be insufficiently lighted.

In addition to the angles of light test, evidence on both sides was given on the Waldram method of measuring light. The conclusion he had arrived at was that the test by this method confirmed that by the angles of light, and that plaintiffs had made out their case. With regard to locality, if any distinction was to be drawn between town and country, the inhabitant of a dark, smoky town could less afford to be deprived of such natural light as reached him.

The question then arose as to whether the plaintiffs were entitled to an injunction or only to damages. Prima facie their right was to an injunction. In his opinion, plaintiffs were quite within their rights in refusing to have their building rebuilt, which would entail much expense and inconvenience. Then it was said that if defendant was not allowed to carry out his plans he would be involved in a loss of £40,000. He had had fair warning of the action in December 1928, and if he had involved himself in loss, that was his own responsibility.

He granted a perpetual injunction, and the defendant must pay the plaintiffs' taxed costs of the action.



Illustration of tile gable springers, which it is suggested in Mr. Nathaniel Lloyd's reply to a reader's query on this page look weak, patchy, fussy and unnecessary. [*From* Building Craftsmanship in Brick and Tile and in Stone Slates.]

READER'S QUERY

TILE GABLE SPRINGERS

R. H. writes: "*I have been looking through Mr. Nathaniel Lloyd's book on* Building Craftsmanship, *and find that there is no mention of tile gable springers. As there is a considerable difference in the methods illustrated in* Little Things that Matter *and a recent article in* THE ARCHITECTS' JOURNAL, *by A. J. Penty, I should very much appreciate his views on this subject.*"

Reference was made to the use of plain tiles as quoins and for corbelling, as for gable springers, on page 65 of *Building Craftsmanship*; and tile gable springers were illustrated (but without comment) in figure 137, which is now reproduced.

Although popular, I venture to think that the use of plain tiles for gable springers is not legitimate. The areas are so small and isolated that the change of material from brickwork produces a patchy effect, and the eye, which naturally looks for strength at a projection, is disappointed to see anything so thin and weak as plain tiles substituted for the thicker and more substantial-looking brick. When the old builders changed from brick to

any other material for their gable springers, they, very properly, used a large block of stone, the obvious and increased strength of which itself justified the change of material. Further, there is no reason or justification for building up gable springers or corbels of plain tiles, which are only meaningless substitutes for the brick of which the wall is built.

These views may be more clearly appreciated by comparison with the springers of a sixteenth-century gable (illustrated in *A History of English Brickwork*, page 155), where the springers are formed of three courses of moulded bricks. I do not think anyone can doubt the greater dignity and repose produced by this treatment, the cost of which would be no greater than building up tile springers.

NATHANIEL LLOYD



Moulded brick gable springers—the legitimate treatment. Such corbelling is quiet, dignified and strong-looking. [*From* A History of English Brickwork.] *See reply to reader's query on this page.*

CORRESPONDENCE

EPSTEIN'S "ART"

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—One is sorry to find Astragal among the admirers of the figures "Night" and "Morning." The leaven comes from a good source, but must, I think, fail to "leaven the whole lump" of public opinion.

The mind of the ordinary man sees the matters as a sculptural grade, on which, at the foot, are the barbaric statues of Easter Island and, at the apex, the majestic group of the Laocoön and other masterpieces. The interval between these is, to him, typical of the path of human progress. A modern group which altogether ignores form and anatomy is looked upon as a reversion towards barbarism and is accordingly resented.

W. BEESTON

THE CALTON JAIL SITE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—May I be allowed to congratulate you on your most excellent leader on this subject which appeared in your issue of July 31?

It would indeed be a tragedy if Edinburgh bungled this great opportunity; an opportunity such as is not likely to occur again during this generation. Your remarks about the various aspects of this problem are most convincing, but I venture to point out one aspect not touched upon in your leader.

The approach from the south from Abbeyhill is one of the main entrances to the city, and seen from this direction any buildings erected on this site must stand out clearly against the sky.

Hamilton's Royal High School is in the foreground on the right, and the importance of the skyline of the new buildings on the Calton Jail site is very obvious. They must form part of one composition with the Royal High School and have a verticality of treatment which could never be secured by the usual horizontally treated blocks. The scale of detail and breaking up of the masses is also most important.

As you say so ably, it is a great opportunity, and the solution can only be found through vision and a real inspiration. Mere scholarly elevations will not solve it, but a big grasp of the spirit of Edinburgh and the greatness of the opportunity.

WILLIAM DAVIDSON

THE UNDERGROUND SCULPTURES

Following is a copy of a letter sent by Messrs. Adams, Holden and Pearson, architects for the Underground Railway offices, to *The Manchester Guardian*, *re* the Underground sculptures:

SIR,—As so much public attention has been given to the sculptures of the new offices of the Underground Railways it may be helpful to your readers to know the main factors which led to the design of the building in its present form and to the placing of the sculptures.

In designing a building the plan is the idea from which its form and character arises. In this case the plan consists of four wings of offices placed round the central hall and battery of lifts, the tower being justified architecturally by the need for a lift-gear chamber and large water storage tanks, so often enclosed in unsightly excrescences on the roof and treated as though they were regrettable necessities. These points, together with certain restricted by-laws of the London County Council governing the heights of buildings and the means of escape, are the main factors in the design.

Arising out of these by-laws we get the strongly marked vertical line of the staircase intersecting with an equally strongly marked horizontal line at the seventh-floor level, and it was this point of intersection which cried out for special emphasis, and it was at this and similar points that the sculpture panels of the "Winds" were placed, the subject being considered appropriate for the reason that the positions were facing every point of the compass and exposed to all the winds that blow, and that the panels were horizontal, therefore suitable to figures in a floating movement.

The sculptors were supplied with panels of uniform size and projection, and it was a condition that the figures were to be carved direct in the stone without the use of the pointer or any mechanical means of reproduction from a preliminary clay or plaster model, the objection to this being that the resulting sculpture is not as a rule the work of the artist's own hand, that it is usually dull and lifeless as a result of its translation from one medium for which the model is suitable to another medium for which it is unsuitable. It was preferred to preserve all the virility and imagination and adventure brought into play with every cut of the chisel, even at the expense of some degree of accuracy of form. Time would not allow of the work being done by one sculptor; the work was therefore placed in the hands of several men who were young enough and keen enough to take up the problem with enthusiasm.

To some extent the architects depended on the friendly rivalry and helpful criticism and general keenness to produce a sense of team work, but it was considered that the isolation of the panels on different flanks and the general uniformity of the mass of each panel would permit of a certain variety in temperament and outlook inevitable in carrying out such a scheme.

With regard to the placing of the sculptures by Epstein there can be no serious question; it is only necessary to imagine the building without the sculptures "Day" and "Night" (and the "Winds") to realize how necessary they are to complete the whole composition.

Whatever may be thought of the merits of this elemental sculpture, the decorative needs of the building have been met, and the architects are content to leave the rest to their last great allies—weather and time.

ADAMS, HOLDEN AND PEARSON

Mr. James Maitland, J.P., retired architect, left £31,239 (personal estate).

TRADE NOTES

On Saturday, July 27, Messrs. Archibald D. Dawnay and Sons, Ltd., held their annual outing and luncheon at Brighton. Mr. Ernest A. Willson, chairman and managing director, presided at the luncheon, supported by Messrs. H. Thorne, E. C. Willson, and S. G. Newstead, directors, and Mr. J. M. Cooper, secretary. Following the toasts, the chairman, on behalf of the London outdoor erectors, presented a gold watch to Mr. F. H. Page, as an appreciation of his care of their voluntary benevolent fund and his direction of the annual outings.

Rubber floors are becoming the vogue with architects specializing in cinema, theatre, and ecclesiastical work. This is likely to be even more noticeable in the cinema of the future with the introduction of the talking film. Rubber flooring has many advantages for work of this nature, among the most outstanding being its resilience and quietness of tread. Rubber is also particularly suitable for the treads and risers of stairs in cinemas and where white nosings are required. These are easily distinguished in the dark, and as they are made in one piece with the rubber covering of the treads and risers there is no risk of the nosing becoming detached and causing tripping. Rubber also lends itself to a wide range of colour-schemes, from plain tints to wood-graining and marbled effects, such as those devised by The North British Rubber Company in connection with their "Paraflor."

Messrs. United Strip and Bar Mills, Ltd., Sheffield, have issued a handy pocket-size booklet setting out the various sections of steel strip and bar they have available for their customers' use. Many useful tables are also incorporated. The company is a branch of the United Steel Companies, Ltd., and caters specially for the reinforced concrete trade. In the service department reinforcement bar is supplied in lengths, ready bent, hooked, marked and bundled, and delivered to suit the contract. A special department under a reinforced concrete engineer gets out quantities and advises generally on reinforced concrete construction for the needs of the smaller contractor. Steel users in the south are catered for by the large stocks for immediate delivery held at the London warehouse. A copy of the booklet may be obtained from the Publicity Department, United Strip and Bar Mills, Ltd., The Ickles, Sheffield.

THE BUILDINGS ILLUSTRATED

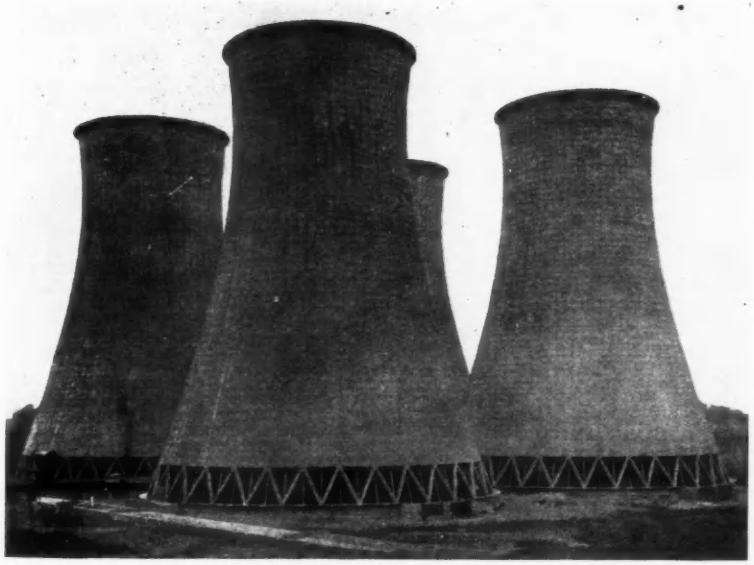
Following are the specialists, contractors, and some of the sub-contractors for the buildings illustrated in this issue:

New press and offices for William Heinemann, Ltd. (pages 230-7). Quantity surveyor, H. J. Venning, F.S.I., etc. Sculptor, Esmond Burton. Messrs. Drytone, Ltd., bookcases, panelling, and storage racks. General contractors, Trollope and Colls, Ltd., who were also responsible for the plumbing, joinery, demolition, excavation, foundations, damp-courses, asphalt, concrete blocks, reinforced concrete; the Dorking Brick Co. and F. Lapath, bricks; Bath and Portland Stone Firms, fireplaces in stone; F. Bradford & Co., artificial stone and stairtreads; Smith Walker, Ltd., structural steel; Tuke and Bell, sewage disposal; J. W. Gray and Son, lightning conductors; Collier, tiles; W. James & Co., patent glazing and metalwork; O'Brien, Thomas, sanitary fittings; Comyn Ching & Co., Ltd., door furniture; Haywards, Ltd., fireproof doors; Thos. Elsley & Co., metalwork.

The Abbey Bakeries, Leicester (pages 240-2). General contractors, Wm. Moss and Sons, Ltd. Sub-contractors: Tuckers, bricks; Constone, Ltd., marble flooring and artificial stone; Arch. D. Dawnay & Sons, Ltd., structural steel; Du Nord and Bells Asbestos, tiles; Heywoods, patent glazing; Jas. Gibbons, casements and window furniture; Crittalls, casements; Arthur L. Gibson, rolling shutters.

House at Frensham (pages 256-7). General contractors, Mills and Sons. Sub-contractors: Henry Hope & Sons, windows; Hill, electric wiring; Goslett, sanitary fittings; T. Elsley, firegrates; Van Straaten, tiles.

Messrs. Tuke and Bell supplied the septic tank at the Heston Air Park (see August 7 issue). Faience work at the garage, illustrated on page 252, was executed by Messrs. Carter & Co., Ltd., of Poole.



Four hyperbolic concrete cooling towers at Longford Power Station, Coventry. They are approximately 100 feet in diameter at the base, and 130 feet high. Each has a normal capacity of 528,000 gallons per hour. The whole of the work was carried out by the British Thomson-Houston Company, Ltd.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full published specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, London, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

23005. Florence, A. P. Open firegrates for burning anthracite, &c. July 26.

22653. Krausz, A. Pivoted windows. July 23.

22539. Ogilvie, J. H. Protection of sea coast against erosion. July 25.

22827. Overton, W. Door hinges. July 25.

23054. Sangwin, W. Preparation of concrete. July 26.

SPECIFICATIONS PUBLISHED

315672. Pagani, A. Machine for cutting and carving by copying a model.

316018. Hitchins, W. G. Wooden panelling for walls and floors.

316040. Aldam, E. H. Sliding and folding doors and the like.

316080. Booth, C. C., and Booth, P. M. Window sills.

ABSTRACT PUBLISHED

313341. Scaffolding (Great Britain), Ltd., and Jones, D. Palmer, 43 Landsdowne Road, Stockwell, London. Scaffolding clamps.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BARKING U.D.C. has appropriated four acres of the Upney housing estate for the purposes of extending the site of the Infectious Diseases Hospital.

The LAMBETH B.C. is to erect houses and dwellings at the following places: Newburn Street, cost £14,250; Cottingham Street, cost £51,300; Dassett Road, cost £2,660; and on the Holderness estate, cost £2,400.

Plans passed by the BARKING U.D.C.: Paint store, Jenkins Lane, for Messrs. Gross, Sherwood and Heald, Ltd.; paint drum store, River Road, for The British Antifouling Composition and Paint Co., Ltd.; offices, etc., Creeksmouth, for Messrs. Coal Conversion, Ltd.; twenty-six houses, Lyndhurst Gardens, for Messrs. E. Glenny and Son; extensions to tin shop and cloakroom, Jenkins Lane, for Messrs. Gross, Sherwood and Heald, Ltd.

EASTERN COUNTIES

The COLCHESTER Corporation is to widen the railway bridge at Ipswich Road at a cost of £15,000.

Plans passed by the COLCHESTER Corporation: Extensions, Congregational schoolroom, Chapel Street, for Mr. D. J. McPherson Burton; house, Ipswich Road, for Mr. C. H. Green; two houses, Gladwin Road, for Messrs. Grimsey Bros.; two houses, Morten Road, for Mr. W. A. Jeffery; shop and store, Old Heath Road, for Messrs. W. J. Vaughan and Sons; stores and garage for Priory, Ltd., North Station Road, for Mr. D. J. McPherson Burton; three shops, St. John Street, for Mr. R. Prestney; house, Harwich Road, for Mr. C. A. Ellis.

SOUTH-EASTERN COUNTIES

The KENT C.C. is to extend the accommodation at the Chartham sanatorium at a cost of £17,000.

The BROMLEY Board of Guardians is to erect a hostel for nurses at a cost of £15,000.

The Kent C.C. is to prepare a scheme for extending the county engineer's offices and depot in St. Peter Street, MAIDSTONE.

The EASTBOURNE Corporation Housing Committee has approved plans submitted by the borough surveyor for the erection of thirty parlour type houses and twenty non-parlour type houses on the Winchelsea Road and Rye Street site.

At a meeting of the EASTBOURNE Corporation Housing Committee the borough surveyor submitted plans for the erection of twenty-eight houses on Victoria Drive housing site. The plans were approved and tenders are to be invited.

The Council of Almoners of Christ's Hospital have accepted the tender submitted by Messrs. Henry Norris & Sons, of Hertford, for the erection of the new science workshops, lecture theatre and the new quadrangle at the Boys' School, HORSHAM, from the designs prepared by Mr. Sydney Tatchell, F.R.I.B.A., surveyor to the Hospital.

Plans passed by the HASTINGS Corporation: Store, rear 200–1 Queen's Road, for Mr. P. H. Oxley, architect; workshops, East Street, St. Leonards, for Mr. P. H. Oxley, on behalf of Coombs Motors, Ltd.; four houses, St. Helen's Road, for Mr. H. M. Jeffery, architect; two houses, Bexhill Road, St. Leonards, for Messrs. Ward, Son and Wray, architects.

Plans passed by the EASTBOURNE Corporation: Grandstand, etc., Meads Road, for Messrs. Murray, Delves and Murray, architects, on behalf of the Eastbourne C. & F. Club; four houses, Park Avenue, for Mr. C. Ford, architect; vicarage, St. Mary's Church, Decoy Drive, for Messrs. P. D. Stonham and Son, architects, on behalf of the Ecclesiastical Commissioners for England; additions, Star Brewery, Star Road, for Mr. A. Ford, architect; seven houses Willingdon Road, for Mr. C. M. Wood, architect; seven houses, Ashburnham Road, for Mr. J. Bowley, architect, on behalf of Messrs. W. Llewellyn and Sons, Ltd.; house, Milton Road, for Mr. A. Ford, architect, on behalf of Messrs. J. Bodle, Ltd.; additions to offices, Ringwood Road, for Mr. F. C. Benz, on behalf of Messrs. W. Llewellyn and Sons, Ltd.; shop, Green Street, for Mr. A. Ford, architect; garage, workshops, etc., Fitzmaurice Avenue, for Mr. A. Ford, architect, on behalf of Messrs. J. Thurlow and Sons; two houses, Park Avenue, for Mr. F. C. Benz, architect; alterations, Park Gates Hotel, Compton Street, for Messrs. Scales and Baker, architects; house, King's Drive, for Mr. C. Ford, architect, on behalf of Messrs. Tanner and Son; garages, etc., Silverdale Road, for Messrs. G. Bainbridge and Sons, on behalf of the Grand Hotel; additions, 140–144, Terminus Road, for Messrs. J. Lyons and Co., Ltd.; alterations and additions, "Bobby's," Lismore Road, for Messrs. G. Baines and Sons, architects, on behalf of Messrs. Debenhams, Ltd.

SOUTH-WESTERN COUNTIES

TORQUAY Corporation Baths Committee has passed plans submitted by the borough engineer for the provision of a swimming bath for children on the site adjoining the refuse destructor.

The BRISTOL Corporation is being asked to prepare a plan and estimate of the cost of covering over a further section of the River Frome above Wade Street Bridge.

CHELTENHAM Corporation Housing Committee has instructed the architect to prepare plans for the erection of 104 houses on Pilley Lane Housing estate.

At a meeting of the CHELTENHAM Corporation Housing Committee, Mr. Rainger submitted a layout for the remainder of Kipling and Shakespeare Roads, providing for twenty-nine pairs of houses. Tenders are to be invited.

Plans passed by the CHELTENHAM Corporation: Institute, Naunton Crescent, for the vicar and churchwardens of Emmanuel Church; extension of printing-machine room, Bennington Street, for Mr. Hayman; house, Naunton Park Road, for Miss E. M. Cox; house, Old Bath Road, for Dr. R. Park; house, Church Road, for Dr. F. W. Lawson; ninety-two houses, Skillicorne Avenue, for the Cheltenham Corporation; 104 houses, Pilley Lane, for the Cheltenham Corporation.

Plans passed by the TORQUAY Corporation: two houses, Oakpark estate, Shiphay, for Mr. A. Chippendale; house, Barnfield Road, for the Gower Construction Co.; house, Mead Road, for Mr. A. Hore; house, Hennapyn Road, for Commander H. L. Lucas; six houses, Burridge Road, for Mr. P. Cavanna; bungalow, Edginswell, for Mr. E. Bartlett; four houses, Newton Road, for Messrs. Harris and Breyley; two houses, Windsor Road, for Mr. W. Murch; alterations, 65 Union Street, for Messrs. Boots, Cash Chemists, Ltd.; four houses, Church Road, St. Marychurch, for Messrs. Pearse Bros.; alterations, 9 The Strand, for Messrs. Timothy White and Co., Ltd.; house, Abbey Crescent, for Miss Turner.

Plans passed by the PLYMOUTH Corporation: Two houses, North Down Road, for Mrs. H. Collins; two houses, Tavistock Road, Milehouse, for Mr. H. L. Pile; nine houses, Salisbury Terrace, Tavistock Road, Devonport, for Messrs. G. H. Smith and Son; two houses, Dale Gardens, for Mr. J. Blatchford; two houses, Dale Gardens, for Messrs. Waycott Bros.; alterations, 53 Bedford Street, for Messrs. Prynne Bros.; four houses, Higher Venn estate, for Plymouth Builders, Ltd.; alterations, Hobart Arms, East Street, for Messrs. Ellery and Co., Ltd.; house, Borrow Park Road, for Mr. J. F. Woodley; six houses, new street off Gwyn Road, for Messrs. Hayter and Coles; alterations and additions, Hyde Park, for the New Victoria Brewery, Ltd.; additions, Manor Lodge, Trafalgar Place, for Viscountess Astor.

MIDLAND COUNTIES

The Worcestershire C.C. is to erect police cottages at PINVIN, KYRE, FRANKLEY, and BREDON.

The WARWICKSHIRE Education Committee is acquiring land for extensions at Little Compton School.

The Board of Education has approved plans of the Warwickshire Education Committee for extensions at Balsall Street Council School, TEMPLE BALSALL.

The Notts Education Committee has prepared plans for the erection of an elementary school at BEESTON.

The Worcestershire Education Committee is to acquire a site at PERSHORE for the erection of a senior school.

The SLEAFORD U.D.C. Housing Committee is acquiring about four acres of land near Grantham for housing purposes.

The WORCESTERSHIRE C.C. has obtained sanction for a loan of £11,000 for the erection of twenty-eight cottages at Barnsley Hall mental hospital.

The WARWICKSHIRE C.C. has purchased fourteen acres of land for extensions at the county mental hospital.

The Notts Education Committee has purchased a site on the Bentwell estate, ARNOLD, for the erection of an elementary school.

The CHESTERFIELD Corporation has under consideration a proposal for the provision of a swimming bath on the old garage site at the electricity works.

BIRMINGHAM Education Committee has approved plans for the erection of an open-air school at Marsh Hill, Erdington, at an estimated cost of £18,000.

The Worcestershire County Education Committee has purchased a site in Pedmore Road, STOURBRIDGE, for the erection of a new senior council school.

The Worcestershire County Education Committee is preparing final plans for the extension of HALESOWEN Grammar School, at an estimated cost of £29,250.

The Notts Education Committee has acquired a site for the erection of an elementary school for 300 children in the Manton district of WORKSOP.

The Board of Education has approved the proposal of the Warwickshire Education Committee for the purchase of a site for the erection of new buildings for the NUNEATON Technical and Art School.

The Warwickshire C.C. is in communication with the Board of Control to ascertain the grant likely in connection with a scheme for the purchase of property at WESTON for conversion into an institution for mental defectives at a cost of £20,000.

The WARWICKSHIRE C.C. has decided to erect a further block of offices in conjunction with the work of the main structure of the new county offices now in course of erection on the site of the Old Barracks, Warwick, at an estimated cost, including furniture and fittings, of £8,750.



House at Frensham. By W. B. Hopkins. The walls are of cavity brickwork, lime whitened. The roof is of grey Cornish slates, with chimneys of red bricks.

Plans passed by the SLEAFORD U.D.C.: Seven shops and dance hall, Market Place, for Mr. R. Garratt; four houses, East Banks, for Mr. F. Gresswell; house, Reford Place, for Mr. W. Rose; new road, between London Road and Grantham Road, for the Marquis of Bristol.

Plans passed by the CHESTERFIELD Corporation: Girl Guides' hall, Cross Street, for the Girl Guides' Association; boiler-house, etc., Dock Walk, for Mr. C. E. Gaunt; house, Ashgate Road, for Mr. F. Longden; extensions, Walton Works, for Messrs. Robinson and Sons, Ltd.; bungalow, Derby Road, for Mr. F. Beardow; two houses St. Leonard's Drive, for Mrs. B. R. Wadsworth; two houses, Walton Road, for Messrs. Dolphin Bros.; bungalow, Dark Lane, for Mr. F. Hubbeck; offices, off Spa Lane, for Holywell Motors, Ltd.

NORTHERN COUNTIES

The MANCHESTER Corporation has prepared a scheme for general street improvements at a cost of £50,000.

The CHESHIRE C.C. is to prepare a draft scheme and estimate for the provision of an isolation hospital for combined areas.

The BOLTON Corporation has obtained sanction to borrow £9,430 for the erection of the proposed new branch library at Tonge Moor Road.

The Trustees of the Haig Memorial Homes are to erect houses in WARRINGTON at a cost of £10,000.

The BOLTON Education Committee is to erect an elementary school for 720 children at Whitecroft Road.

The Lancashire Education Committee is seeking sanction to borrow £59,242, for the erection and equipment of the grammar school at ULVERSTON.

The Rotherham Education Committee is considering the provision of school accommodation in the HERRINGTHORPE district.

The MANCHESTER Corporation Housing Committee is making provision for the erection of 450 houses on the new estate at Newton Heath.

Sanction is being sought by the Lancashire Education Committee to borrow £23,366 for the erection of a grammar school at POULTON.

The Lancashire Education Committee is seeking sanction to borrow £49,110 for the erection and equipment of the proposed boys' grammar school at LEIGH.

The YORK Corporation has instructed the city engineer to advertise for tenders for the erection of 112 houses on Hunt's land, Tang Hall, and for 56 further houses on the Burton Lane estate.

The MANCHESTER Corporation has voted £243,600 on the proposed acquisition of land and its development as a housing estate at Newton Heath.

The YORK Corporation has approved the rebuilding of Messrs. Burton's premises in Coney Street and extensions by Messrs. Woolworth's in Coney Street.

The BOLTON Corporation has passed amended plans by the borough engineer of the washhouses and slipper baths proposed to be erected in Rothwell Street.

The SHEFFIELD Corporation proposes to proceed with the construction of the Burbage reservoir, provided the Government is willing substantially to assist in defraying the loan charges.

The YORK city engineer has prepared schemes for a new bridge and approach roads at Burton Stone Lane at a cost of £17,000; a new bridge and roads at Haley Terrace at a cost of £8,400; and new bridge at Clifton at a cost of £60,500.

The SHEFFIELD Corporation has obtained sanction to borrow £5,550 for the purchase of an additional housing site at Greenhill, and £32,508 in connection with the erection of houses on the Wisewood Estate.

The LANCASHIRE C.C. has decided to make alterations and additions at the following county police station premises: Haslingden, £1,900; Rawtenstall, £450; Billinge, £1,250; Darwen, £1,250; and at Seaforth, £1,600.

At a meeting of the Oldham Education Committee the proposal was carried for the erection of an infants' department to accommodate 350 scholars, and a junior department to accommodate 500 scholars at LIMESIDE.

Plans passed by the OTLEY U.D.C.: Office and stores, Falcon Works, for Messrs. Waite and Saville, Ltd.; bungalow, Yorkgate, for Mr. J. A. Yates; workshop, Farnley Street, for Messrs. O'Brien and Richmond; four houses, Leeds Road, for Mr. Robinson.

The YORK city engineer has prepared plans for new roads at Dringhouses at a cost of £16,300; to the Great Ouseburn boundary at a cost of £23,500; from Poppleton Road to Acomb Road at a cost of £13,000 and from Pavement to Haymarket at a cost of £5,500.

The borough surveyor has been instructed by the WARRINGTON Corporation to proceed with the preparation of details for the construction of a proposed bridge from Warrington Bridge to the north side of St. James's Church, as a substitute for the road over the Wilderspool level crossing.

The BOLTON Corporation has obtained the approval of the Minister of Health of the Council's scheme for town hall extensions and new municipal buildings, including the erection, furnishing and equipment of a new central library, sessions hall, police courts and offices.

At a meeting of the WARRINGTON Corporation the borough surveyor reported that the Cheshire Lines Committee proposes to make extensive alterations to the Central Station. He was authorized to negotiate for the widening of the road under the station bridge in Winwick Street to 60 ft.

Plans passed by the STALYBRIDGE Corporation: Alterations, Reindeer Inn, Huddersfield Road, for Messrs. Walker and Homfray's, Ltd.; butcher's kitchen, Grosvenor Street, for the Stalybridge Industrial Co-operative Society, Ltd.; four houses, Clarence Street, for Messrs. Thomas Dean & Co., Ltd.

Plans passed by WARRINGTON Corporation: Buildings, Lousher Lane, for the Dussek Bitumen Co., Ltd.; premises, Sankey Street, for Messrs. Montague Burton, Ltd.; additions, Patten Hall, for the trustees of the Holy Trinity Church; machine room, Vernon Street, for the Castle Rubber Co., Ltd.; additions, Erwood Street, for the Warrington Co-operative Society, Ltd.; two shops, Mill Lane, for Mr. J. T. Barton; alterations and extension to casting shop, Bank Quay, for the British Aluminium Co., Ltd.; two shops, Hansall Avenue, for Messrs. Layne and Co.; additions, Whitecross Institution for the Clerk to the Guardians.

Plans passed by the OLDHAM Corporation: sixteen houses, Elgin Road, for Messrs. J. Whitehouse and Sons; two houses, Oriel Avenue, for Messrs. Hawthorne and W. & H. Bloor; nine houses, Cheltenham Street, for Mr. T. Waller; alterations to Grosvenor Cinema, Union Street, for Picture House (Oldham), Ltd.; alterations, Market Place, for Yorkshire Penny Bank; extensions, out-patients' department, Union Street, for the Governors of Oldham Royal Infirmary; eight shops, Walers Road, for Mr. R. Whitehead; conversion of offices into shops and warehouses, Lord Street, for Mr. J. Bailey.

Plans passed by the SHEFFIELD Corporation: Six houses, Vainor Road, for Mr. Thomas Barker; three houses, Bevercotes Road, for Mr. Thomas Pye; two houses, Milden Road, for Mr. P. H. Slater; three houses, Vainor and Milden Roads, for Mr. J. Barker; two houses, Abbey Lane, for Mr. W. C. Mander; two houses, Delph House Road, for Messrs. Simpson Bros.; re-erection of Old Blue Bell P.H., Broad Street, for Messrs. J. Smith's Tadcaster Brewery Co., Ltd.; two houses, Meadow Bank Avenue, for Messrs. Dyson and Son; two houses and garages, Vainor Road and Grove Avenue, for Mr. B. F. Glossop; four houses, Dalewood Avenue, for Mr. J. V. Auckland; two houses, Roxton Road, for Messrs. J. Marsh and Son; four houses, Whirlow Court Road, for Messrs. Dyson and Co.; two houses, Barnet Avenue, for Messrs. Bonser Bros.; two houses, Dalewood Road, for Mr. A. Tate; two houses, Longley Lane, for Mr. A. Oxspring; two houses, Ellenborough Road, for Mr. B. W. Cockson; two houses, Retford Road, for Messrs. W. and E. Sadler, Ltd.; ninety houses, Wisewood Estate, for the estates committee of the City Council; twenty-four houses, Endcliffe Glen Road and Endcliffe Vale Avenue, for Messrs. R. Charlesworth, Ltd.; four bungalows, Essendine Crescent, for Mr. F. T. Walker; rebuilding, Fox and Duck Inn, Fulwood Road, for Messrs. John Smith's Tadcaster Brewery Co., Ltd.; six houses, Donnington Road, for Mr. J. C. Mason; ten houses and shops, Abbeydale Road south, for Mr. J. V. Auckland; house, Infirmary Road, for Sheffield Savings Bank, Ltd.; house, Middlewood Road, for Royal London Mutual Insurance Society, Ltd.; six houses, Canterbury Crescent, for Mr. J. W. Sivil.

Plans passed by the BOLTON Corporation: Conversion of houses into flats, Blackhorse Street, for the Corporation; covered way, Municipal Secondary School, Great Moor Street, for the Corporation; eleven houses, Adrian Road, for Mr. Wilfred Andrew; shop, Crompton Way, for Bolton Co-operative Society, Ltd.; layout plan, Lydgate Lane, for the executors of Henriette Bailey; extension to doubling mill Brownlow Fold Mills, for Messrs. Rd. Harwood and Son; extensions, St. Helens Road, for the Trustees of Daubhill Wesleyan Church; work room, 1 Westbourne Avenue, for Mr. J. Shurmer; eight houses, Crompton Way, for Mr. Alfred H. Witter; four houses, Brook Hey Avenue, for Mr. James Latham; four houses, Conway Avenue, for Mrs. A. Hartley; two houses, Regent Road, for Mr. William Reddybough; boiler house, Chandos Street, for the Tramways Committee of the Corporation.

SCOTLAND

The GLASGOW Estates Development Company, Ltd., has prepared a scheme for the erection of 500 houses of four apartments at Duke's Road, Burnside.

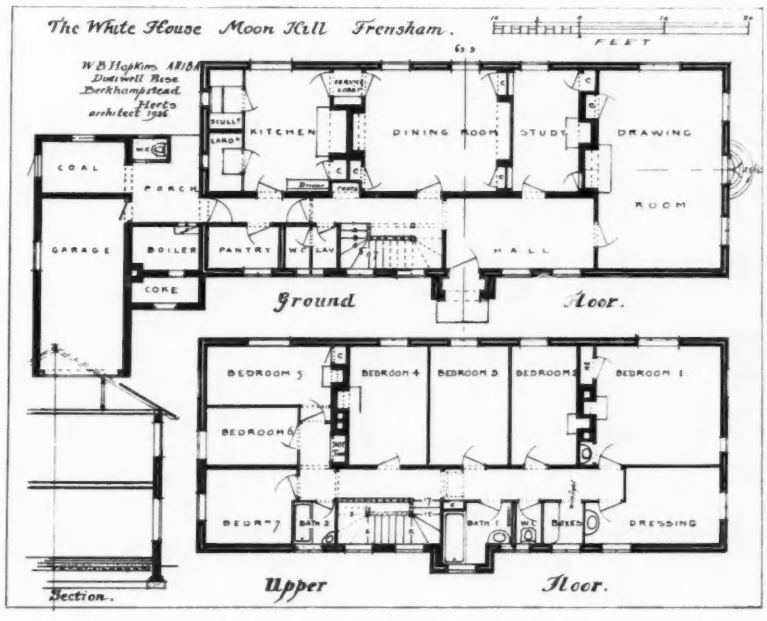
Messrs. Marks and Spencer, Ltd., and Messrs. Wallace and Weir, Ltd., are to erect a new building at the corner of Argyle Street and Virginia Street, GLASGOW.

The GLASGOW Corporation has agreed to sell land at Altyre Street to Messrs. George Green, Ltd., for the purpose of a proposed extension to their cinema in Wellshot Road.

WALES

The Cardigan and Pembroke county councils have agreed upon a scheme for the construction of a new bridge at LLECHTYD at an estimated cost of £21,500.

SWANSEA Corporation has asked the borough architect to confer with the borough engineer in regard to the layout and preparation of roads and sewers in connection with the erection of further houses on the Townhill and Mayhill sites.



Ground- and upper-floor plans and part section of a house at Frensham. By W. B. Hopkins. A photograph of the exterior is reproduced on page 256.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_2	Barnard Castle	N.E. Coast	1 6	1 1½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood ..	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1*s.* 4*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* NAVVY, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Broken brick or stone, 2 in., per yd.				£0	11	6
Thames ballast, per yd.				0	10	0
Pit gravel, per yd.				0	15	0
Pit sand, per yd.				0	12	6
Washed sand, per yd.				0	13	0
Screened ballast or gravel, add 10 per cent. per yd.						
Clinker, breeze, etc., prices according to locality.						
Portland cement, per ton				£2	8	0
Lias lime, per ton				2	0	0
Sacks charged extra at 1*s.* 9*d. each and credited when returned at* 1*s.* 6*d.*						
Transport hire per day:						
Cart and horse £1 3 0	*Trailer*			£0	15	0
3-ton motor lorry 3 15 0	*Steam roller*			4	5	0
Steam lorry, 5-ton 4 0 0	*Water cart*			1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube .	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. .	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube .	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* BRICKLAYER, 1*s.* 9*d. per hour;* PLUMBER, 1*s.* 9*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . 0 4 3
DO. 6 in., per ft. . 0 5 0
DO. 9 in., per ft. . 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. . 0 8 3
DO. 6 in., per ft. . 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour.*

London stocks, per M.	£4	5	0
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¼ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	0	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1*s.* 9*d. per hour;* DO. *fixer,* 1*s.* 10*d. per hour;* LABOURER, 1*s.* 4*d.* per hour; SCAFFOLDER, 1*s.* 5*d. per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, ax. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube . £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.
PLAIN face Portland basis, per ft. sup. £0 2 8
DO. circular, per ft. sup. 0 4 0
SUNK FACE, per ft. sup. 0 3 9
DO. circular, per ft. sup. 0 4 10
JOINTS, arch, per ft. sup. 0 2 6
DO. sunk, per ft. sup. 0 2 7
DO. DO. circular, per ft. sup. 0 4 6
CIRCULAR-CIRCULAR work, per ft. sup. 1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run 0 1 1
DO. circular, do., per ft. run 0 1 4
HALF SAWING, per ft. sup. 0 1 0
Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.
SETTING 1 in. slate shelving in cement, per ft. sup. £0 0 6

RUBBED round nosing to do., per ft. lin. £0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed 1 7 6
YORK SILLS, W. & T., ft. cub. fixed . 1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup. 0 1 3
DO. 2½ in. thick, per ft. sup. 0 1 6

SLATER AND TILER

SLATER, 1*s.* 9*d. per hour;* TILER, 1*s.* 9*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£13	0	0
Countess	25	0	0
Duchess	32	0	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6 7 0	6 7 0
Grey-green do.	5 9 0	5 9 0
Green peggies, 12 in. to 8 in. long	4 13 6	4 13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1*s.* 9*d. per hour;* JOINER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Timber, average prices at Docks, London Standard			
Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	4
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	3
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	9
DO. framed in floors, roofs, etc., per ft. cube	0	5	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals 1s. 9½d. per hour;* MATE, *do. 1s. 4d. per hour;* ERECTOR, *1s. 9½d. per hour;* FITTER, *1s. 9½d. per hour;* LABOURER, *1s. 4d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO.. in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	6

PLUMBER

PLUMBER, *1s. 9½d. per hour;* MATE OR LABOURER, *1s. 4½d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc., per cwt..	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, *1s. 9½d. per hour (plus allowances in London only);* LABOURER, *1s. 4d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, *1s. 8d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅝ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1s. 6d. to 2s. per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, *1s. 8d. per hour;* LABOURER, *1s. 4d. per hour;* FRENCH POLISHER, *1s. 9d. per hour;* PAPERHANGER, *1s. 8d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	3
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	6
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	3
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, ⅝ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅝ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ¾ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	⅛ in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	5½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, AUGUST 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Stained Glass." By Miss M. Chamot. 12 noon. Indian Section: "Tibetan Art." 3 p.m. **12 noon.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Travel by Road and Rail." By L. W. Phillips. **12 noon.**
BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Dark Races—III." By the Official Guide Lecturer. **3 p.m.**
IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY, Imperial Institute Road, South Kensington, S.W.7. Exhibition of Royal Society of Arts Competition of Industrial Designs, 1929. Open daily until September.
NATIONAL PORTRAIT GALLERY, Trafalgar Square, S.W. "Portrait Sculptors—II." **3 p.m.**
CITY OF MANCHESTER ART GALLERY. Exhibition of Paintings and Drawings by Ernest and Dod Proctor. Open daily from 10 a.m. to 6 p.m. (Sundays, 2.30 p.m. to 5 p.m.) until September 14. **10 a.m.**

THURSDAY, AUGUST 22

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Renaissance Furniture." By L. O. Faraker. "Etching." By Miss M. Chamot. **7 p.m.**
BRITISH MUSEUM, W.C.1. "Origins of Architecture—II (Roman)." By Cecil Hallett, B.A., F.S.A. **12 noon.**

FRIDAY, AUGUST 23

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By Miss M. Chamot. 12 noon. "Byzantine Art." By Miss M. Chamot. 3 p.m. **12 noon.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Lighting and Illumination." By L. W. Phillips. **3 p.m.**

SATURDAY, AUGUST 24

Sunrise, 5.58. Sunset, 8.5.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Eighteenth Century Furniture." By L. O. Faraker. 7 p.m. "Italian Decoration." By Miss M. Chamot. 7 p.m. **7 p.m.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Applications of Electricity." By L. W. Phillips. **3 p.m.**

MONDAY, AUGUST 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By Miss M. Chamot. 12 noon. "Northern Sculpture." By T. F. Wilson. 3 p.m. **12 noon.**
SCIENCE MUSEUM, South Kensington, S.W.7. "Noteworthy Engineering Achievements." By L. W. Phillips, M.I.E.E., A.INST.P. **3 p.m.**
BRITISH MUSEUM, Bloomsbury, W.C. "Monuments of Egypt—II." **3 p.m.**

TUESDAY, AUGUST 27

NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Architects from Wren to Adam." By John Steegmann, M.A. **3 p.m.**
WALLACE COLLECTION, Manchester Square, W.1. "French Furniture." By W. P. Gibson. **3 p.m.**
SCIENCE MUSEUM, Exhibition Road, South Kensington, S.W.7. "Travel by Road and Rail." By L. W. Phillips. **3 p.m.**
BRITISH MUSEUM, Bloomsbury, W.C. "Greek Sculpture—III," and "Monuments of Assyria—III." Both at 3 p.m. **3 p.m.**

WEDNESDAY, AUGUST 28

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Arts and Crafts." By T. F. Wilson, F.R.S.A.I. **3 p.m.**
NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Some Later Architects." By John Steegmann, M.A. **3 p.m.**
BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Dark Races—IV." By the Official Guide Lecturer. **12 noon.**

THURSDAY, AUGUST 29

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. **3 p.m.**
BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Middle Ages." By the Official Guide Lecturer. "Greek Sculpture—IV." Both at 3 p.m. **3 p.m.**

FRIDAY, AUGUST 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By L. O. Faraker. 12 noon. "Chippendale." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

SATURDAY, AUGUST 31

Sunrise, 6.10. Sunset, 7.50.
A.A.S.T.A. Summer Tour to the Rhineland via the Ardennes and the Moselle. From the evening of August 31 to September 8 or 12.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Furniture of the Seventeenth Century." By L. O. Faraker. 12 noon. "English Furniture of the Eighteenth Century." By L. O. Faraker. 3 p.m. Indian Section: "Mogul Art." By T. F. Wilson. 3 p.m. "Eighteenth-century Furniture." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon.**
BRITISH MUSEUM, Bloomsbury, W.C. "The Romans and their Arts." 12 noon. "Life and Arts of the Middle Ages." 12 noon. Tour of the several Sections. 3 p.m. **12 noon.**

MONDAY, SEPTEMBER 2

WALLACE COLLECTION, Manchester Square, W.1. "English Portraits." By W. P. Gibson. **3 p.m.**
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Costumes." By L. O. Faraker. 12 noon. "Costumes of the Seventeenth Century." By L. O. Faraker. **12 noon.**
BRITISH MUSEUM, W.C.1. (A) "Monuments of Egypt." (B) "Monuments of Assyria." By Official Guide Lecturers. **3 p.m.**

TUESDAY, SEPTEMBER 3

LONDON SOCIETY. Visit to the Church of St. Andrew-by-the-Wardrobe, Queen Victoria Street, E.C.4. **2.30 p.m.**

WEDNESDAY, SEPTEMBER 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

THURSDAY, SEPTEMBER 5

BRITISH MUSEUM, W.C.1. "Origins of Architecture—I (Greek)." By Cecil Hallett, B.A., F.S.A. 12 noon. "Early Britain—I (Old Stone Age)." By Cecil Hallett, B.A., F.S.A. 3 p.m. **12 noon.**

FRIDAY, SEPTEMBER 6

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 7

Sunrise, 6.21. Sunset, 7.34.
BRITISH MUSEUM, W.C.1. "Early Britain—II (Late Stone Age)." By Cecil Hallett, B.A., F.S.A. **12 noon.**
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

MONDAY, SEPTEMBER 9

ARCHITECTURAL ASSOCIATION. Annual Excursion to Germany. Departure for Hamburg in S.S. "St. Louis."

TUESDAY, SEPTEMBER 10

ARCHITECTURAL ASSOCIATION. Tour to Germany. Arrival at Hamburg.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture—I." 12 noon. "Architecture—II." 3 p.m. Both by L. O. Faraker. **12 noon.**

WEDNESDAY, SEPTEMBER 11

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 12

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. **12 noon.**
INTERNATIONAL HOUSING AND TOWN PLANNING CONGRESS opening at Rome. Open until September 22. Particulars from the Organizing Secretary, Mr. H. Chaoman, 25 Bedford Row, W.C.1.

FRIDAY, SEPTEMBER 13

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Tudor and Jacobean Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 14

Sunrise, 6.32. Sunset, 7.18.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

TUESDAY, SEPTEMBER 17

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Pottery." By L. O. Faraker. **12 noon.**

WEDNESDAY, SEPTEMBER 18

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Metalwork." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Medieval Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

SATURDAY, SEPTEMBER 21

Sunrise, 6.42. Sunset, 7.3.
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chippendale." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

MONDAY, SEPTEMBER 30

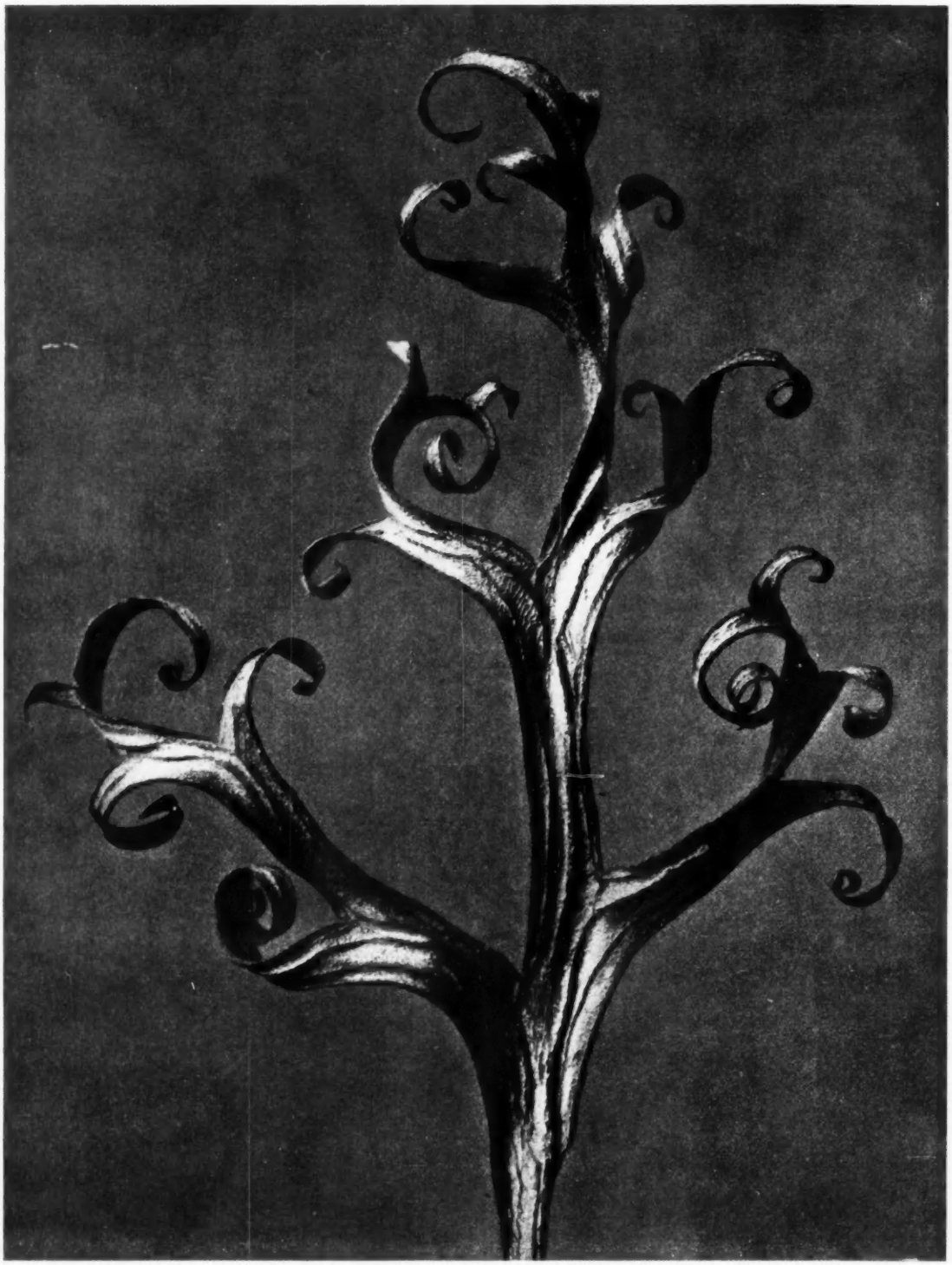
ROYAL SANITARY INSTITUTE, 90 Buckingham Gate, S.W.1. Opening of the Autumn session of training courses for examinations for sanitary inspectors, smoke inspectors, associateship (general hygiene and sanitation), associateship (food hygiene), and sanitary science. Particulars obtainable from the Secretary at the above address.

MONDAY, OCTOBER 7

LONDON UNIVERSITY, Gower Street, W.C. Opening of Session.
ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. Opening of Session.

THURSDAY, OCTOBER 10

BEDFORD COLLEGE, Regent's Park, N.W. Opening of Session.

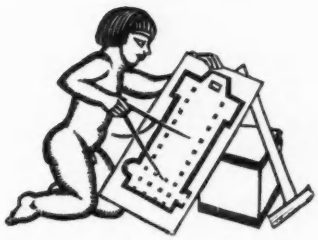


FROM A FAIRY ANVIL

No human smith hammered refractory metal into these exquisite outlines and twists. It is, in fact, a photograph, on a scale several times larger than nature, of part of a dried leaf of the plant larkspur (delphinium) ; and is typical of many prepared by Professor Karl Blossfeldt for the purposes of a book, Art Forms in Nature, *reviewed in this issue on page 287.*

Professor Blossfeldt has " in hundreds of exposures of plants, without retouching or artistic effect, solely through enlarging them several times, brought home to us the relationship between natural forms and those created by the human mind."

THE ARCHITECTS' JOURNAL



WEDNESDAY, AUGUST 21, 1929

THE ABBEY SACRISTY RECONSIDERED

"*Our correspondence columns, since the model was erected, have proved that the bulk of educated public opinion is overwhelmingly against the combination of Mr. Walter Tapper's model and the site for which he designed it.*"
—*The Times*, April 15.

"*There is an overpowering body of architectural and æsthetic opinion against it.*"—*The Nation*, July 6.

"*I cannot treat the opposition seriously.*"—Dr. Foxley Norris's statement to the Press, August 14.

IN its issue for February 27 last THE ARCHITECTS' JOURNAL printed the account of an interview with the Dean of Westminster, in which the various sites for the new sacristy were discussed and illustrated. The announcement of the Dean's proposals, first made public a twelvemonth earlier, excited no more than a lukewarm interest till the stock and rag model was put up to illustrate it early this present year. In view of the singular importance of the scheme we took pains to place before our readers the fullest possible information which we were enabled, by the courtesy of the Dean, to obtain direct from the source.

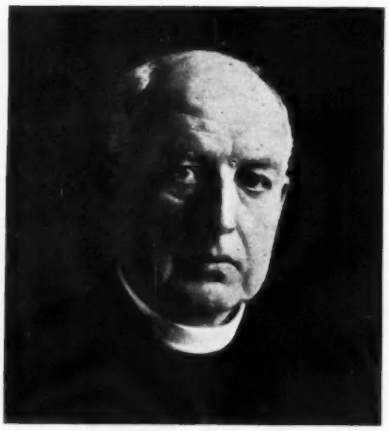
Beyond such a statement of the principal facts in the case this JOURNAL did not deem it necessary to go. The law of this country makes the Dean of Westminster absolute monarch of the realm that lies within the precincts of his church. A decanal decree had gone forth, and national Church and national Parliament alike being powerless to intervene, nothing short of a public outcry of exceptional volume could justify the Dean's proposals being called in question in these pages.

It is the duty of an architect to carry out the instructions of his client or his client's agent. So long as the Dean of Westminster could claim to speak as the representative of the people and their accredited custodian, neither ourselves nor the profession we represent had any business to give vent to our private disapproval. Does this claim still hold good today? We do not think that it does; on the contrary, we think it is time the Dean was made to understand that the instructions he has issued to his architect on behalf of the client he represents stand repudiated, being in direct opposition to the known desires of his client.

What, then, has the nation, our present client, declared? If we disregard those individual dislikes and preferences none of which is wide or substantial enough to influence the Dean in his actions, we are left with one general conclusion in which a majority of the English people is now clearly united. It is that *the north façade of the Abbey, with all its falsifications of substance and detail, is yet of so vast an importance, as a work of art and a piece of history, that not another foot of it must be covered up by a building of any sort whatsoever.* That is the verdict which public opinion has given in the case before us.

We do not see how the Dean can expediently do otherwise than bow to this verdict; we do not see how the present sacristy design in the position now chosen can possibly be carried out. It is with the deepest possible regret that THE ARCHITECTS' JOURNAL makes this observation, for as it is the architect's function to build, so it is the function of this JOURNAL to foster the desire to build and to applaud the manifestations of this desire. Those people (and they are many) who claim that new building in itself and irrespective of its quality can be destructive of beauty, can be an evil to be shunned in any guise, have received no word of encouragement in these pages. Nor should the article we print this week be read as tending to such a view.

If one thing is clear, it is that a sacristy for the Abbey is needed. Another fact, however, has become equally clear these last days: it is that the English people will not allow the site chosen to be built over. In what manner the custodians of the Abbey are to take cognizance of this fact remains yet to be seen, but to ignore it, as they have hitherto ignored it, is now no longer possible.



DR. W. FOXLEY NORRIS, DEAN OF WESTMINSTER SINCE 1925, BY WHOM, ACCORDING TO AN ARTICLE IN "THE TIMES" FOR MARCH 21, 1928, "IT HAD BEEN FINALLY DECIDED TO ERECT A SACRISTY" BY THE EAST WALL OF THE NORTH TRANSEPT.

ABBEY CHURCH OR CLUB?

For nine hundred years the Abbey of St. Peter at Westminster has been found adequate for its religious purpose—and its original history goes back much farther than that. Why should there be this urgent need of enlargement? Is it that the Prebendaries can find no very convenient place in which to hang up their surplices and their cassocks? Is it that it lacks some of the amenities of a modern London club?

"The New Statesman"

THE VOICE OF THE PEOPLE

From the number of letters this society has received from ordinary people . . . it is clear that the Dean's proposal is popularly, and we think rightly, disliked.

A. R. Powys, Secretary,
The Society for the Protection of Ancient Buildings.

THE WAYS OF DEANS

The work of recasting the porches was commenced before the death of Sir G. G. Scott. In September 1884 scaffolding was put up to the whole of the north transept; in 1886 an application for aid was made to Parliament. Mr. Fowler, in replying on behalf of the Government to criticism, stated that he had received a letter from the Dean saying that "this is no question of beautifying the exterior, but is simply to prevent it from coming down, and it is for that, and nothing else, that the funds are required. . . ." When the close hoarding, which, I well remember, shut out any view of what was being done, was taken away about 1892, it was clear that the whole transept had been very completely "beautified." Restoration schemes are now conducted so far as possible in secret, on the principle that dead buildings tell no tales.

W. R. Lethaby: "Westminster Abbey and the King's Craftsmen."

THE SACRISTY: TWO SITES THAT ARE THE DEAN'S

THE Westminster Abbey Commission, who published their Final Report in 1891, have not been altogether forgotten. They had before them a scheme for a memorial chapel on the site of the old sacristy, to the west of the north transept. Of four proposed schemes this was the one favoured by Pearson, the then Abbey architect. The late Alfred Waterhouse, at that time President of the R.I.B.A., was a member of the Commission. Waterhouse and his colleagues might have used their own words in referring to this scheme. They were, however, so struck with the criticism formulated by the Archbishop of Canterbury that they elected to quote his criticism in full, adding no further comment of their own. His Grace's words are as applicable to the sacristy scheme of 1929 as they were to the memorial chapel scheme of 1891:—

The north side of the Abbey [Archbishop Benson] is the only part of the Abbey in which you see the whole design of the church by itself; the south side is so entirely blocked up by other buildings, and the east end is so altered by Henry VII's chapel, and blocked by St. Margaret's, the projection of the Chapter House is so great, and the alteration of the west end is so great, that there is no other part of the Abbey which gives you an idea of what was the original design of it as a great church. THEREFORE, THE ERECTION OF ANY BUILDING AGAINST IT, EVEN IF IT WERE A LOW BUILDING, WOULD COMPLETELY BLOCK OUT THE ORIGINAL CONCEPTION OF THE ABBEY, *and would prevent a view of the elevation; and then, amongst all the cathedrals of England, it would be the one which could not be seen.*



THE HOUSES IN ABBEY GARDEN OCCUPIED BY BUSINESS FIRMS. ONE OF THE ARGUMENTS AGAINST THE PROPOSED ST. DUNSTAN'S CHAPEL IS THAT THE WESTMINSTER SCHOOL IS CRAMPED FOR ROOM.

A NEW PHASE

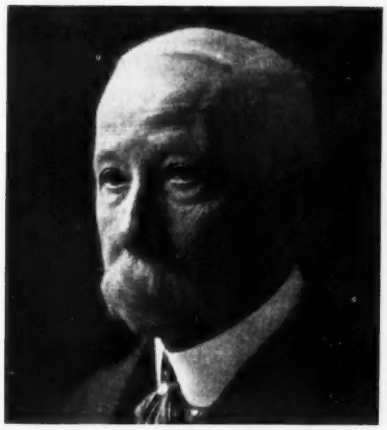
DECLARED "UNAVAILABLE"

NEXT STEP

The Archbishop's statement expresses very accurately indeed the present state of public opinion about the open space to the north of the Abbey. The Archbishop, in point of fact, was opposing a scheme for building to the west of the transept, but his words refer to the north façade in general; they do not divagate into a discussion of the comparative importance of various sections of this façade. It is most unfortunate that the more recent sacristy debate should not equally have stuck to the point. From the very beginning a profitless dichotomy split up the opponents of the sacristy as to whether the site to the east of the north porch, chosen by the Dean, was worse than the site to the west of the porch, where a sacristy had once stood. Some preferred the first, some the second evil. Signs were not wanting that those in favour of the sacristy rejoiced at this dichotomy and encouraged it. If only their opponents could be brought to the point of annihilating each other! Enough, perhaps, if the eyes of the public could be diverted from the real issue to this disagreement between two sections of the criticizing force. On one point the critics were unanimous: they asked that the Royal Fine Arts Commission should be invited to give its opinion. The Dean, with great tactical skill, arranged that while the request was to be met, the Royal Commission should yet be warned strictly off the main issue and made to confine itself to the entirely irrelevant argument between the east-siders and the west-siders. "You state," the Commission writes to the Dean, "that



THE VIEW OF THE NORTH TRANSEPT, WHICH IS ONLY ONE OF THE REMAINING VIEWS OF THE ABBEY THAT ARE THREATENED BY THE SACRISTY AS SHOWN IN THE RECENT MODEL. THE CHAPTER HOUSE BLOCKS ANOTHER.



PROFESSOR W. R. LETHABY, ARCHITECT TO WESTMINSTER ABBEY FOR MORE THAN TWENTY YEARS, WHOSE OPINION HAS BEEN ASKED FOR SINCE MARCH OF THIS YEAR BY THE SOCIETY FOR THE PROTECTION OF ANCIENT BUILDINGS AND OTHERS—AND TILL NOW WITHHELD.

CONCEALMENT IMPOSSIBLE—

The Royal Commission are unable to conceal their regret that any addition to the Abbey should be found necessary.

Opening sentence of the Royal Fine Arts Commission's Report

—BUT NOT OF THE ABBEY

From most possible points of view this small structure effectively blocks out one of the few beautiful aspects of the Abbey which still remain to us after successive restorations have transformed the exterior.

Mr. Roger Fry

MODEL WRONG BOTH WAYS

Continually I walk by the path from the Crimean Memorial to the Strangers' Entrance of the Houses of Parliament, and going or coming I execrate it every time.

Lord Askwith

A DOMESTIC PROBLEM

I do not consider we are qualified to advance any alternative to what is, after all, the Dean and Chapter's domestic problem of accommodation. All we ask and expect of them is, to solve their domestic problem without detriment to this great building—a building which has such an intense significance to all of British blood,.

Sir Frank Baines at the Annual Meeting, The Society for the Protection of Ancient Monuments, June 25

NANA SAHIB NEXT?

As regards the Abbey the Dean is absolutely supreme. He might put up a statue to Nana Sahib if he chose. So we must decline to accept any responsibility for his proceedings.

Lord Salisbury to the British Ambassador in Paris, 1879

having examined all available schemes, the choice has narrowed itself to two sites, and ask which of these two sites the Royal Fine Arts Commission would advise as being least open to objection." For a moment it certainly did appear that here lay the whole subject of the debate.

In no official communication emanating from the Abbey was to be found the smallest hint that the Royal Commission was considering anything less than the question of the sacristy in its entirety. When on May 14 we were told that the Commission "could find no suitable alternative site," how many of us knew that "could find" should have read "was told not to try to find"? Further, the Commission was "understood to have arrived at a tentative decision to recommend the erection of the sacristy" on the site where the model of the proposed structure was placed last November. "I have deliberately sought the advice of the Commission," the Dean tells us (and it is all that he tells us) on June 4.

On June 26, however, *The Times* published the entire text of the Commission's report, and now the cat was out of the bag. The Royal Fine Arts Commission has been criticized for not condemning the scheme outright. Such criticism is unjust, for the Fine Arts Commission has no power to do more than answer the questions that are put to it. The most we can say is that the Commission might have refused to answer the question. Suppose the Dean had asked them whether they would prefer two sinks to be installed in the sacristy rather than one? There must be a limit to the restrictions laid upon this important body when a matter is submitted to it for judgment; there is a degree of triviality, surely, which the Commission cannot permit its deliberations to exceed. Nothing would have been lost, and something, at any rate, gained by it, in dignity and strength, if the Dean's question had been sent back to him with a hint that in so narrow a form it could not be usefully dealt with by the highest æsthetic judicature in the land.

But not only was the choice laid before the Fine Arts Commission a trivial choice: it was a choice between two things, both of which had already been publicly condemned. For there can be no doubt about the meaning of the general outcry. The English people WILL NOT ALLOW THE OPEN GROUND ALONG THE NORTH SIDE OF THE ABBEY TO BE BUILT UPON. More than that the bulk of us have not said as yet, nor is there any need for us to say more. A great deal of ink has been expended on suggestions for alternative sites. But surely the finding of an alternative site is the business of the Dean and his architect, not the business of the public? The Dean, in his turn, has taken much trouble to prove that no other site can be found that is not utterly impracticable. Very well, if no site exists other than the open space to the north of the chevet, then the Dean will (to our universal regret) have to do without his sacristy. The 1891 report of the Westminster Abbey Commission recognizes that this open space is "free from any difficulties connected with the acquisition of a site." But, unlike Dr. Norris, the members of the Commission took considerable trouble to study the ways in which a site or sites for further buildings might be acquired. I will here mention only one sacristy site, the acquisition of which has been recommended by an exceptionally large body of opinion, and opposed on the flimsiest grounds by the Dean and the Receiver-General of the Abbey. This is the building containing the gymnasium of the Westminster School and the chapel of St. Dunstan, now used by the school as an armoury.

The objections to the use of this building, which at first was vaguely dismissed as "unavailable," are, we learn, twofold:

1: It is the property of the governors of the Westminster School.

2: It cannot be linked up with the south transept without "destroying the usefulness" of St. Faith's Chapel.

The first of these statements may be true, but what of it? Is there any reason why steps should not be taken to acquire a building from the Westminster School? No one has so far suggested that the governors of the school would be unwilling to come to terms. On the contrary, a correspondent writing to *The Times* over the pseudonym of "Custos," points out that the Abbey possesses "property in Great College Street, now serving for garages, or even property elsewhere, which would also serve after reconstruction to compensate the school for what it would hand over." And what of the two houses in Abbey Garden, built in Dean Bradley's time and now occupied by the Great Western Railway and the Gas Light Company? Does not the Abbey here possess something which the school might be glad to have in exchange for buildings that are a part historically, as well as architecturally, of the Abbey complex, and whose return to the Abbey can only be a matter of time?

The second of the Dean's objections to the use of the school gymnasium takes the form rather of a personal confession than of a statement of fact. One cannot, of course, but accept the avowal of his inability to cross over to the gymnasium without disturbing the worshippers in St. Faith's Chapel. But if the Dean, who has had charge of Westminster Abbey for four years, is baffled by a problem admittedly of some difficulty, is there not happily at his disposal the advice of a distinguished architect who is the greatest authority on medieval architecture alive today, whose knowledge of Westminster Abbey has never at any time been rivalled, and who has been officially connected with the church for the not inconsiderable period of over twenty years? The Society for the Protection of Ancient Buildings some six months ago asked that Professor Lethaby should answer two questions:

What was the advice he gave to the Dean and Chapter in regard to the proposed sacristy? And:—

What is his own opinion about an addition to the Abbey?

The Society's request met with no answer of any sort, unless, indeed, we interpret, as we are entitled to interpret, the ensuing silence to be one. The question I suggest should be put to him, however, is one to which no one, least of all a special authority of Professor Lethaby's eminence, could possibly take exception. Let him be asked to say:

DOES HE AGREE THAT IT IS IMPOSSIBLE TO CONTRIVE A SUITABLE PASSAGE FROM THE SCHOOL GYMNASIUM TO THE POETS' CORNER OF THE ABBEY WITHOUT MAKING IMPOSSIBLE THE PRIVATE PRAYER THAT IS NOW DAILY OFFERED UP IN ST. FAITH'S CHAPEL?

Here is what the Council of the Society for the Protection of Ancient Buildings has to say on the question: *This chapel, when it was built, was the sacristy of the church. Now, it will be clear upon reflection that this proposal need not prevent the continued use of St. Faith's Chapel for private devotion. Its use as an approach to the suggested sacristy could be confined to times when some special service or ceremony was taking place, on which occasion the chapel is not used for private prayer.*

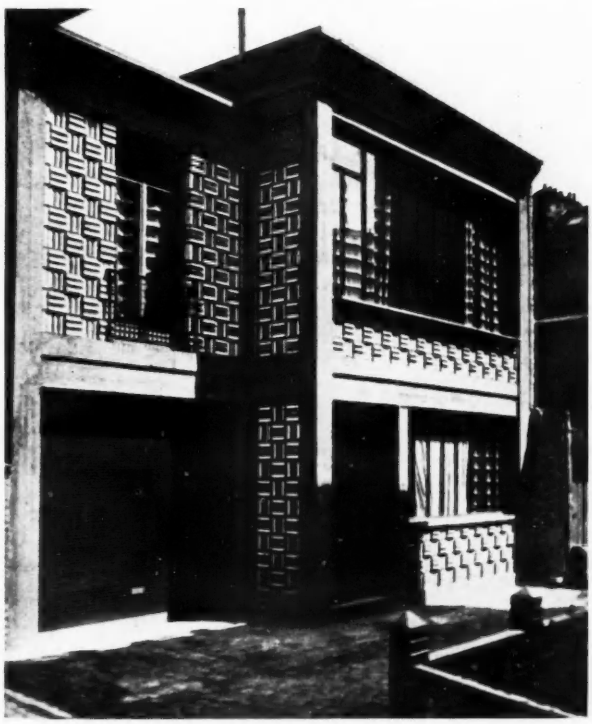
Should Professor Lethaby's answer be (as it very well may) in the affirmative, then the Dean's task will clearly be somewhat more complicated than many people now foresee, but in facing such a further difficulty he will have the sympathy of all. More than our sympathy he cannot, and doubtless will not, expect. The owners of the Abbey have told him without any possibility of misunderstanding that the land to the north of the church is, in his own useful phrase, "unavailable." It is for him, not for us, to look about once more.

CHRISTIAN BARMAN.

NEWS & TOPICS

CITY BASEMENTS AS GARAGES

Recently a director of a well-known London firm of contractors was interviewed on the subject of a garage which one of the big oil companies proposes to construct on the roof of a six-storied building in the Waterloo Bridge Road. He admitted that structurally a roof garage was a perfectly practicable addition to any suitable modern building of sufficient strength. On the other hand, he pointed out that a basement garage, which obviates the necessity of installing costly car-lifts and only needs the provision of short ramps leading from and to the street level, was an expedient to which attention would soon have to be directed. He added that many City buildings, of which the basements are now almost useless or unremunerative, would be particularly adaptable for conversion into garages or parking places. *Verb. sap.:* landlords who own property of this kind would be well advised to consult their architects without delay.



A studio-maisonette-garage, designed by the brothers A. and G. Perret, and erected just off the Rue de Vaugirard in the Montparnasse quarter of Paris.

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UNEMPLOYMENT AND THE USE OF ALL-BRITISH MATERIALS

I have seen a copy of the open letter which the F.B.I. has addressed to the Lord Privy Seal, otherwise Mr. J. H. Thomas, emphasizing the urgent necessity of inserting a clause in all contracts entered into under the new Government schemes for public works in relief of unemployment to make it a hard and fast condition that British plant and materials *only* shall be used. "It is not sufficiently realized," this letter states, "that each time an order is placed abroad the prestige of the particular British industry involved is dealt a blow, as publicity today is world-wide in extent. Foreign producers are not slow to take advantage of instances of foreign goods being bought by authorities in the United Kingdom, and the effect of this is most prejudicial to British producers in the general markets of the world."

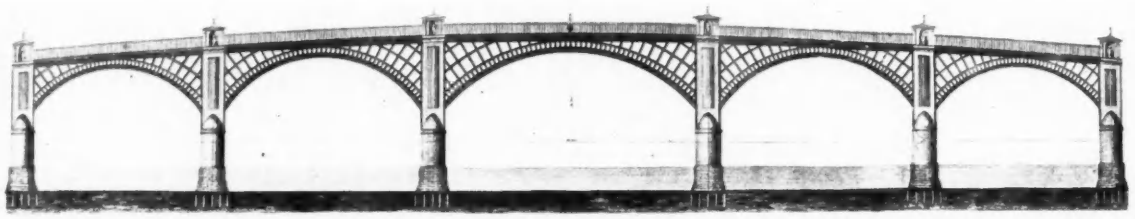
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On the face of it everyone will sympathize with this demand, for the fostering of our own industries is obviously a better remedy for unemployment than the palliative of artificially creating work, on which to employ in unskilled capacities men discharged from skilled jobs in industry. Large and increasing quantities of structural and reinforcement steel, cement, bricks, tiles, slates, and roadmaking material are imported into this country which might be obtained at home. Our dangerous dependence on the United States for hard woods and on Northern Europe for soft seems to be largely the result of the conservatism of our timber merchants. Again, many architects have been obliged to procure particular types of ornamental glass from abroad owing to their inability to interest our manufacturers in new processes and effects. On the other hand, there is an inexplicable reluctance among architects to make use of the many beautiful and none too costly panelling woods which the Empire grows in such abundance—a reluctance by no means always shared by their Continental colleagues. British marbles are also unjustly spurned; Aberdeen granite is only hideous when polished.

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A NEW STUDIO DESIGNED BY THE PERRETS

A correspondent has sent me the accompanying photograph of a "bijou" combination studio-maisonette-garage, as Meredith's General Ople would have called it, which has recently been built for a sculptress to the designs of the famous brothers, A. and G. Perret. This little two-storied building, which is L-shaped in plan, lies just off the Rue de Vaugirard in the Montparnasse quarter of Paris. It was constructed with a concrete framework and cornice (the Perrets are tenacious champions of the cornice), and has infillings of the ordinary, and very ugly, pinkish-white Paris stock brick. The concrete work has been left uncemented, with the grain of the timber shuttering showing. The brickwork is patterned into groups of three bricks laid



When London Bridge was a-building, Messrs. Telford and Douglas prepared a design, of which this indicates the elevation of that portion which would lie between the fronts of the wharves.

vertically, alternating with three laid horizontally, the latter being slightly protruded from the former. The studio is on the extreme right of the first floor, with a room used for the exhibition of the owner's sculpture underneath it. The bedroom is to the left of the front door and immediately above the garage. The net cost of this admirably forthright and decidedly architectural job of work was considerably less than that of the cheapest three-room workman's cottage that has yet been built in this country.

*

MORE DESIGNS FOR LONDON BRIDGE

George Dance's scheme for twin bridges, mentioned in last week's issue of THE ARCHITECTS' JOURNAL, was only one of several schemes reviewed by the Select Committee which sat in 1800 to report on ways and means of building London Bridge. At least two other designs are worth reviving. The first, by Telford and Douglas, because, as an essay in iron, it shows what advances had been made at so early a date. The second, by R. Dodd, who is reputed to have had a hand in Waterloo Bridge, is a high-level bridge designedly capable of taking river traffic under its great arches. This bridge is combined with regular embankments upon which stand "fireproof" warehouses in long series.

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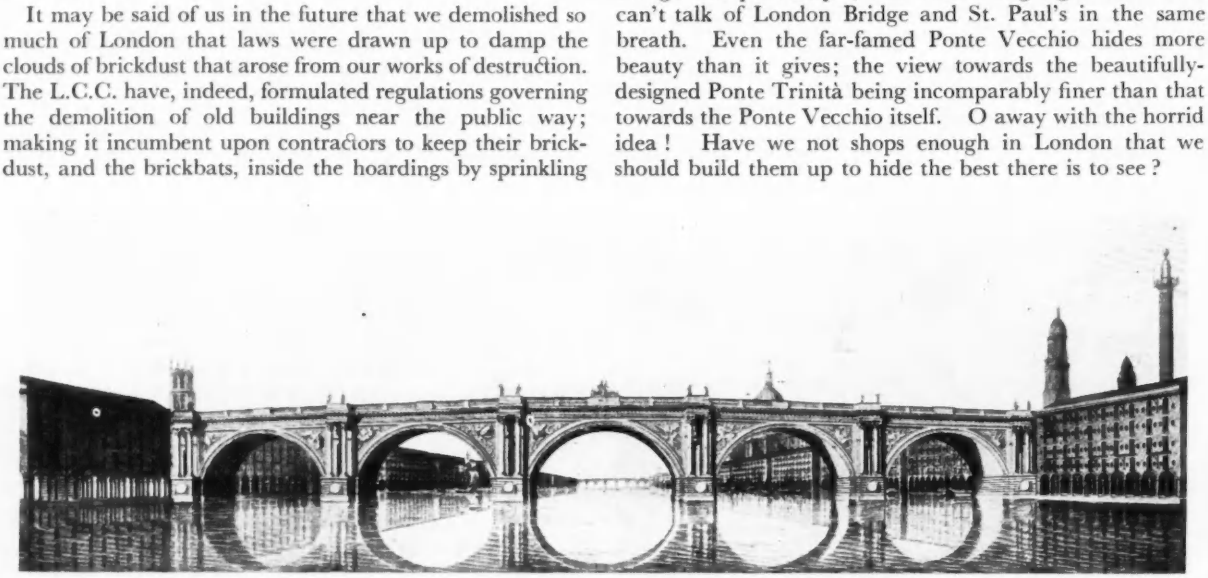
DUST AND DEMOLITION REGULATIONS

It may be said of us in the future that we demolished so much of London that laws were drawn up to damp the clouds of brickdust that arose from our works of destruction. The L.C.C. have, indeed, formulated regulations governing the demolition of old buildings near the public way; making it incumbent upon contractors to keep their brickdust, and the brickbats, inside the hoardings by sprinkling water as the work proceeds, by pulling down the inside work before the outer walls are felled, and so on. Too late again, for the worst is over. Do we not remember those days when the tide of battle raged up and down Regent Street, while from clouds of dust came the ominous rumblings that told of the death of Nash? Alas! And after these years that have gone since then, again alas!

*

NO SHOPS ON THE BRIDGE, PLEASE!

Colonel Wilfrid Ashley's suggestion that the new Charing Cross Bridge should be lined with shops on each side is not likely to find many supporters. One gathers from his letter to the Press that he wishes to save pedestrians from the boredom of looking upon the river, with Waterloo Bridge and Somerset House in the distance, or the tedious prospect of the County Hall and Houses of Parliament. Since for countless thousands of pedestrians and travellers alike this view is one of the bright moments in their daily round, Colonel Wilfrid Ashley would seem to be aiming low in his fear of avoiding the conventional. In actual fact it is one of the less worthy features of Wood's plans for Bath that the jolly river is given no part to play in the scheme of things, and I for one can never look upon the smug little Pulteney Bridge from the road side of it without regretting the pause in the perpetual façade of Bath that was missed when the river was shut out from view. Again, old London Bridge was picturesque, but what a rag-tag affair! You can't talk of London Bridge and St. Paul's in the same breath. Even the far-famed Ponte Vecchio hides more beauty than it gives; the view towards the beautifully-designed Ponte Trinità being incomparably finer than that towards the Ponte Vecchio itself. O away with the horrid idea! Have we not shops enough in London that we should build them up to hide the best there is to see?



Another design for a stone bridge, to admit shipping to pass under its centre arch, with views of the proposed embankments, and fireproof warehouses above them, by R. Dodd, engineer, 1799.

GLASGOW'S CIVIC ARCHITECTURE

The architects of Glasgow have written a letter to the Corporation deploring the system of employing an official department to design important architectural civic buildings. They point out that there are public baths, hospitals, and an aerodrome among the list of projected civic works, and that it cannot be expected that a Corporation department should be capable of producing the best that Glasgow can give. Nor can it. The Corporation saves something in fees, but it receives in return architecture that is stereotyped, unadventurous, and dull; reflecting little of the true artistic life and impulse of the city. The idea of saving money by employing tame architects is fraught with every evil, denying to a very important cultural class the right of civic expression. I am convinced that this misplaced parsimony springs from a state of ignorance in those who set themselves to be civic governors today; and as it could never have happened in the days when such cities as Liverpool or Leeds produced their fine civic buildings, so now there will be a dearth of fine buildings to reward the cheeseparing and dull-witted " baillies " of Glasgow. They will be given the architecture they deserve.

ASTRAGAL

IN MEMORIAM: GEOFFREY SCOTT

1883—1929

On August 15 Geoffrey Scott died of pneumonia in the Rockefeller Institute, New York. He was a son of the late Mr. Russell Scott and a nephew of Mr. C. P. Scott, the former editor of *The Manchester Guardian*. He was educated at Rugby and New College, Oxford, and whilst at Oxford won the Newdigate Prize. After leaving New College he became librarian and secretary to Mr. Bernhard Berenson, the art critic. For some years he lived with Mr. and Mrs. Berenson in their villa near Florence. During this period he engaged in architectural practice in collaboration with Mr. Cecil Pinsent, designing, among other works, a very delightful library for Mr. Berenson's villa, " I Tutti." At the same time he wrote the book by which he will be most remembered—*The Architecture of Humanism*. This was published a few months before the outbreak of war in 1914. In spite of the unpropitious moment of its appearance, it survived the distraction of men's thoughts for four years, and a second edition was called for in 1924. In the meantime, Geoffrey Scott's own interests had been diverted to another direction. During the war itself he was honorary attaché and later Press secretary to the British Embassy in Rome. Subsequently, he published a volume of poems, *A Box of Paints*, with drawings by Albert Rutherston, and in 1925 his *Portrait of Zelide*. He was now definitely set on the path which led to his greatest literary opportunity, the editing of the newly-discovered *Boswell Papers* and the writing of a life of Boswell. It was whilst he was engaged upon these tasks that he died after a few days' illness in America at the age of forty-six.

In the obituary notices of Geoffrey Scott which have appeared in the daily Press, it was perhaps to be expected that most prominence would be given to his work as a man of letters. When he turned from architectural philosophy to eighteenth-century biography, the brilliance and penetration of his intellect were, in the nature of things, likely to be more widely recognized. His subject had then a more general appeal; a larger audience was qualified to appreciate his powers as he displayed them in the field of his later choice. For this reason less than justice has in his obituary notices been done to the importance of his position as an architectural theorist.

The Architecture of Humanism marks a critical point in the development of architectural philosophy. It has not simply the virtues of a scholarly study written with grace and distinction; it has the qualities of a great work; and the debt under which it has laid contemporary and future generations of architects can hardly be exaggerated. In the most masterly fashion it diagnoses and analyses the cardinal fallacies which stultified architectural theory during the nineteenth century, and no more brilliant piece of exposition is to be found in the whole history of the



The late Geoffrey Scott. From the drawing by Albert Rutherston.

philosophy of architecture than this portion of the work. If the book had done no more than this it would still have been entitled to a permanent place in the library of architectural theory. But it did much more. It developed a thesis regarding humanistic values in architecture of which account will always have to be taken in any future treatment of the subject. And, finally, it restored to us a true understanding and enjoyment of Baroque architecture.

That Geoffrey Scott should have died at so comparatively early an age, and with the possibility that if he had lived he might have returned again to architecture, is a profound tragedy. But we have this much consolation. In *The Architecture of Humanism* he has left to us one great monument.

L. B. B.

THE REBUILDING RUINED

BY DENIS

With Views of Examples

A great work has been carried out in France, in the rebuilding of the churches in numerous villages throughout a large area, damaged or laid in ruins during the war. This made by the French Government that everything would be restored, and that Germany would pay for all the wreckage that had to be restored, seemed to offer no solution for a problem which was apparently beyond human endeavour to solve.



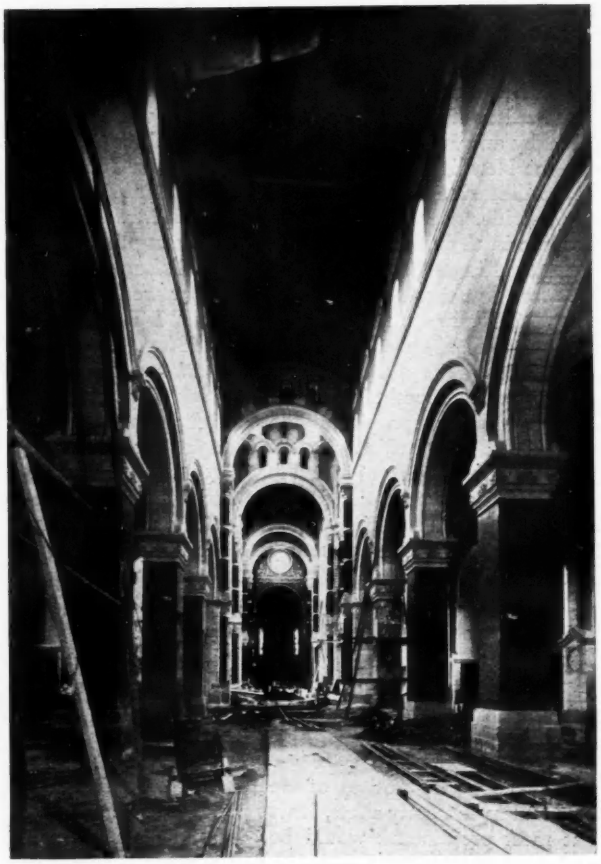
An exterior view of the cathedral at Albert, showing scaffolding in position on tower and porch.

The germs of a solution had, however, been discovered quite early in the war by the promoters of the co-operative movement, of which most people knew next to nothing. The flooding of the Marne a few years before the war had created a somewhat similar problem on a small scale, which the co-operators had found means of solving. They formed a new type of co-operative society, in which the *sinistrés* all joined to pool their resources and their credit, to obtain loans for rebuilding and restocking their farms. This same method was once again applied, in the same district, after the Battle of the Marne had driven the Germans back in the autumn of 1914. It succeeded so remarkably that the Government soon adopted the scheme with enthusiasm; and when the war ended, co-operative reconstruction

THERE can be no precedent in history that is even remotely comparable with the colossal programme of church building and church reconstruction which has reached its climax in the devastated districts of France within recent years. For the second time since 1922, the French hierarchy last year floated a big public loan with immediate success, to finance the restoration of some 3,000 churches which were, in varying degrees, reduced to ruins in the devastated districts. The first loan of 200 million francs was subscribed within five days in 1922, when the franc was worth more than double its present value.

THE NATURE OF THE PROBLEM TO BE SOLVED

The ingenious method by which this vast programme of reconstruction has been financed deserves notice, before discussing the way in which the work of reconstruction has been carried out, and the elaborate organization that has been created to supervise and assist the architectural work involved. From the earliest days after the armistice, the Catholic clergy in the devastated districts have been foremost among the pioneers of reconstruction. When great tracts of France were still howling wildernesses of shell-holes, littered with unexploded shells and ammunition, and impassable with tangles of rusted barbed wire, the priests—who had gained a new experience from contact with the male population, either as army chaplains or as common soldiers who had been mobilized on the outbreak of war—were the first to set to work in creating some sort of habitable conditions in the old battle zone. Before long the small farmers and other inhabitants of the ruined areas, who had been for years entirely cut off from their homes, began to troop timidly back towards the ruins which they had been forced to abandon in frantic haste when the Germans poured into France in 1914. The chaos left by the war was indescribable; and even the lavish promises



The cathedral at Albert: The interior of the nave, looking towards the high altar, with work in progress.

OF FRANCE'S WAR-CHURCHES

GWYNN

from the Somme Department

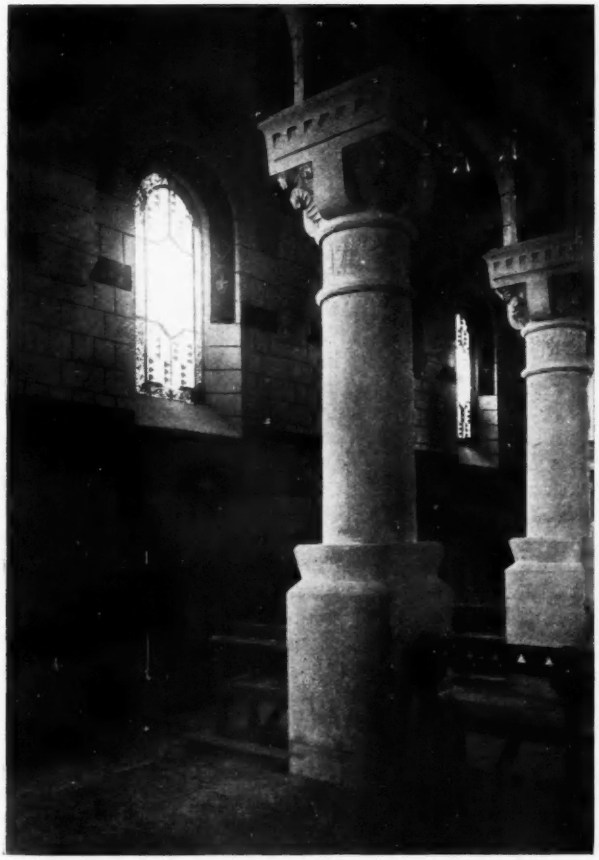
article describes the means by which reconstruction has been financed, and pays a tribute to the practical and untiring efforts of the priests, who led the way.

societies of the same kind were encouraged everywhere, and before long became the only recognized intermediary between the Government's Reconstruction Ministry and the villages whose homeless people wished to present their compensation claims together.

Their advantages were obvious. Ignorant and homeless and bewildered people could unite in employing skilled lawyers and surveyors to present their claims provisionally within a short time; and the claims were then sifted out and verified in Paris, as the basis upon which compensation grants were to be made. It was these co-operative societies alone which enabled the people of the devastated districts to return to their homes. And among the public-spirited men and women who devoted themselves to assisting them in formulating and verifying their claims, and to encouraging them by personal example to return to the wilderness of the war area—in surroundings of indescribable discomfort and even of considerable personal danger until the debris of the war had been cleared away—the priests were pre-eminently conspicuous for their energy and devotion and self-sacrifice.



The reconstructed church of Coullemelle, a representative village in the devastated area.



A view in the interior of the church at Coullemelle, showing decorative frieze, and the treatment of the stone columns.

Their untiring efforts quickly confirmed the new popularity and respect they had gained by their military service in the war, and was to have a profound effect upon the problem of rebuilding the ruined churches. An adaptation of the original co-operative reconstruction societies was quickly evolved, which enabled important separate interests—such as the coal mines or the beet-sugar factories, or towns like la Bassée or Reims—to raise loans on a large scale on the security of the compensation annuities which the Government had undertaken to pay. These separate loans were before long floated in considerable number for special purposes. They were an indirect form of State borrowing, inasmuch as they were secured by the Government's compensation annuities, and they made a direct appeal to those who were concerned in reconstructing the towns or industries in their own part of France. And among the first loans of this sort to be floated with immediate success was one issued jointly on behalf of the three thousand ruined churches, in all the dioceses which had been wrecked by the war. It was floated in the usual way, in bonds of 500 francs, which were issued at 475, the subscribers receiving 6 per cent. free of all taxation, in addition to a considerable bonus on redemption after a short period within which the entire compensation claims would have been paid in full by the French Government.

A SERIES OF IMMENSE RECONSTRUCTION LOANS

That the money should have been forthcoming on such terms can hardly be called surprising. But this was only one of the series of immense reconstruction loans which were issued at the time on similar or even more favourable terms. Its immediate success placed the church-builders in possession of a great sum of money with which their large programme could be undertaken at once. It took



The west front of the church at Cachy has eaves protecting the clock from the weather.



The church at Assevillers nearing completion. Its tiny scale may be judged by the figure of the man standing in the upper window.

time for all the preliminaries to be arranged; but within recent years the results of the first loan have been evident in every diocese, as the work undertaken when the money became available has been reaching completion. Such rapid progress has been made, during the past year especially, that scarcely a Sunday has passed without the bishops of the more important dioceses having to perform the consecration ceremony for the opening of at least one, and sometimes of two or three new churches. Now that a second loan for an equal amount has been successfully floated, the work of church building has continued still faster. But already most of the churches which were only partly destroyed have been completely put in order.

Churches of every period were included in the immense number which have had to be restored or replaced. The most famous of them were generally outside the scope of the rebuilding loan. The great cathedrals, for instance, and a certain number of the more interesting old village churches had been classed as historical monuments, and as such were the direct responsibility of the Fine Arts Ministry. But even these have been restored in many places; and not long ago Cardinal Luçon presided over the consecration ceremonies at the reopening for religious services of the ruined cathedral of Reims, part of which is now available for constant use. But apart from these outstanding examples, the great majority of the three thousand ruined churches are the property, and the concern, of the municipalities or communes which they served before the war. Many of them were so utterly destroyed that they were scarcely even traceable as ruins. In some cases the very foundations were so shattered that they could not be used again. But in most cases it has been a question of restoring wreckage of greater or less extent. Usually the whole roof has had to be renewed, or steeples and towers rebuilt, in addition to repairing the wreckage of some particular part of the building. And the discovery of bombs and mines which had been hidden in various parts of the church buildings by the Germans before their retreat added immensely to the difficulty of the work.

WIDESPREAD SUPPORT FOR THE RESTORATION SCHEMES

Many of the churches were very old, and it has been a general rule to restore all the essentials of their former character. But in some places, where whole towns or villages have been blotted out, or whole streets destroyed (as at Arras or Reims, for instance), entirely new problems have arisen; and many interesting experiments have been carried out in introducing quite modern architecture in keeping with the general scheme of rebuilding around the new church. For the most part, the people—who own the churches under the existing law—have been anxious to restore the former appearance of the old buildings, which had for centuries been the principal feature of the landscape throughout north-western France. Their destruction was one of the most melancholy aspects of the wholesale ruin of the countryside over a great extent of France, and the popular demand for their reconstruction produced most curious political consequences. Many of the local politicians who had for years been profoundly anti-Catholic and hostile to the clergy, joined at once after the war in the effort to rebuild the churches over which such bitter controversies had arisen. The Bishop of Amiens, for instance, was constantly supported, on platforms in connection with the work of reconstruction, by deputies and councillors and mayors who had been bitterly anti-clerical before the war. And it was by no means only the

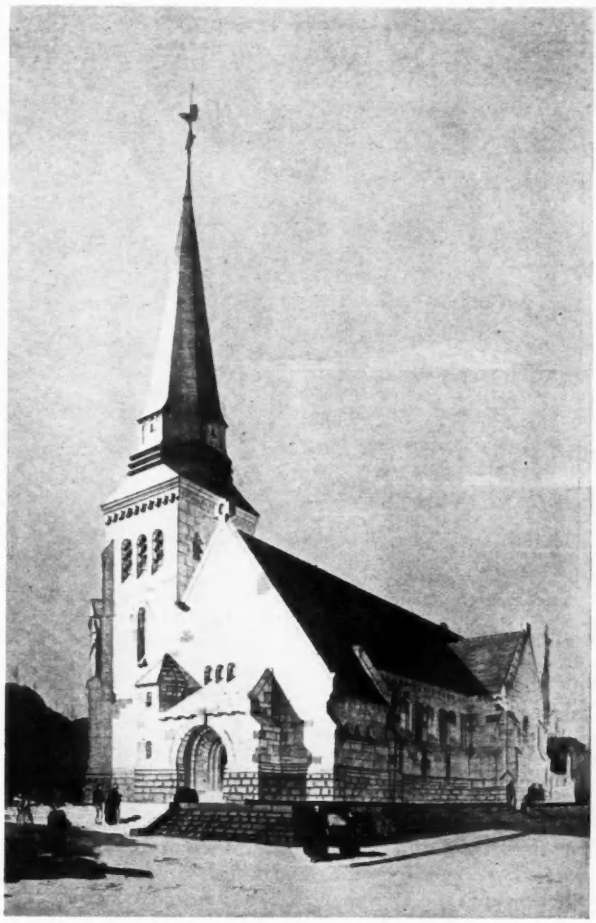
Catholics who joined in subscribing to the church-building loan.

Having been among the most active organizers of the co-operative reconstruction societies in the beginning, the clergy and their bishops applied to the task of rebuilding the churches the same lessons which had been so useful in enabling the homeless population to verify their claims to compensation and to pool their resources in buying materials for reconstruction work. The churches themselves provided a special problem, since many of them could not profit by the use of cheap modern building materials. It was urgently necessary to ensure that the work of restoration should be carried out only by thoroughly competent architects; and in places where churches had to be entirely rebuilt, supervision became necessary to prevent the erection of unsightly buildings. The whole work of reconstruction had to be undertaken so quickly that such supervision was difficult, because so many contractors and surveyors and architects were required that many of them did not possess the usual qualifications.

HOW ARCHITECTURAL CONTROL WAS EXERCISED

The problem was so large that it may be interesting to know how control over such matters was exercised. The position was complicated by the fact that the churches are legally the property of the commune in which they are situated. The local council has therefore power to appoint its own architect or to refuse the services of anyone outside. And its approval had to be obtained for everything that was suggested. In some cases the councils have invited the diocesan commission in charge of church reconstruction to choose the architect and plans. But in general the plans have always been prepared in consultation with the technical advisory committee of each diocese. The composition of these committees has been remarkably distinguished. In Reims, for instance, the committee includes, besides the Vicar-General as the Archbishop's personal representative, a number of well-known architects and other experts. It includes three presidents of the architects' societies in different departments; two of the principal architects of the Commission for Historical Monuments, and one of the directors of the French Archæological Society. In the Pas de Calais and the other departments concerned, the committee is similarly composed of a combination of clergy, architects, and archæologists of high standing. And as a sort of tribunal of appeal in cases where disputes arise, a special commission has sat in Paris, which includes various Inspectors-General of Historical Monuments, professors in the Ecole des Beaux Arts, and such eminent scholars as Mgr. Battifol and M. Henry Cochin.

One of the principal concerns of these advisory committees has been to encourage sound ideas regarding church decoration—which falls outside the scope of the Government's compensation scheme, but has been undertaken by various charitable societies. Illustrated books and pamphlets describing the best examples of ecclesiastical art, and suggesting the most economical means of replacing what was destroyed, have been distributed to the various reconstruction societies for their enlightenment. The principal points which the advisory commission has emphasized are: the suitability of the proposed designs for Catholic worship (to prevent the erection of churches which are more suggestive of a synagogue or a mosque or a secular building); the fulfilment of essential requirements in regard to accessibility, climatic conditions, the existing character of local architecture and scenery, and



The architect's perspective drawing of the reconstructed church at Fresne-Mazancourt.



The church at Berny en Sauterre, a brick and stone building, with multiple clock faces in the spire.



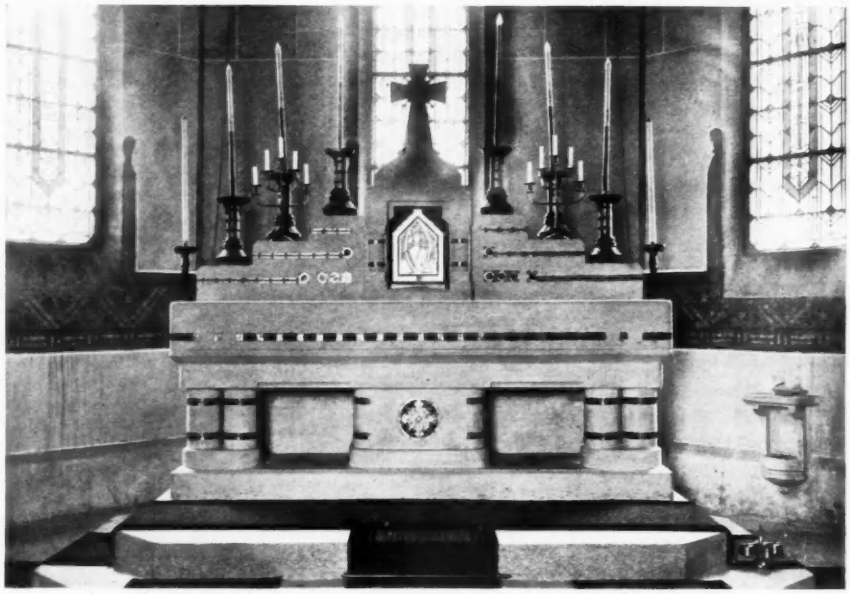
Another example of multiple clock faces, protected by eaves, in the spire of the church of Dompierre en Sauterre.

the size of the population to be served; the best use of the most suitable materials; and the limitations involved in the finances available. None of the other existing supervisory bodies is responsible for these considerations. The prefects' duties, for instance, consist chiefly in enforcing the sanitary and other regulations required by the Ministry of Health. The Reconstruction Ministry was concerned chiefly in seeing that the work was not executed so fast as to outrun the allotment of compensation instalments within the statutory periods. And the Fine Arts Department is concerned only with a limited number of buildings of exceptional historical importance.

Two special problems have caused great difficulty. One was the necessity of building without a moment's delay in order to provide some sort of adequate shelter for the congregations. The other was the resulting local demand for using the cheapest and quickest materials in order to get the work done. The advisory commissions have by no means ruled out concrete or other modern materials, but they have tried hard to insist on eliminating all cheap ornamentation which cannot be expected to last or which is unworthy of church building. Cheap woodwork and cheap statues have been generally discouraged; and the commissions have been strongly supported by personal appeals from the bishops, in addressing the various charitable societies, to use only the best materials and to give nothing to the churches that is not worthy of inclusion in them. The bishops have reinforced these exhortations by appeals to the great traditions of the past, and while refusing to discourage any form of modern art that is genuine and sincere, they have emphasized the present opportunity for a great revival of French ecclesiastical art. While being supremely anxious to build on as large a scale as possible, in the hope that the recent religious revival will extend, they have tried to stimulate private generosity in supplementing the very limited resources available from the Government's compensation funds; so that every church which is now built may be completely durable and solid, and may be as large as possible, to meet the requirements of a future expansion

R.I.B.A. Students' and Architects' Registers

Attention is drawn to the fact that at the office of the R.I.B.A. two registers are kept: 1: containing the names of advanced students of recognized schools, and 2: containing the names of architects willing to take such students. The intention is in this way to assist advanced students up to the stage of the completion of their qualifications for exemption from the final examination; one of the qualifications for exemption from the final examination being twelve months' experience in an office during the fourth and fifth years of the school course. The Council hope that general use will be made of the registers, and that as many architects as possible will place their names upon the register.



The high altar of the church at Dompierre en Sauterre, of which the exterior is illustrated above, showing the complete scope of the reconditioning.



ENGLISH PRECEDENT No. 78

CHURCH OF SAINT PETER AND PAUL, BLANDFORD FORUM, DORSET. (1732–9.)

The transept seen in this view from the south-east of the church is both intrinsically ugly and inharmonious with the rest (see last week's English Precedent). Its inappropriate Doric order, its trivial little window, its projecting entablature, supported only by the corner pilasters, are all lamentable, though they throw into pleasing relief the bold and sensible design of the nave itself.

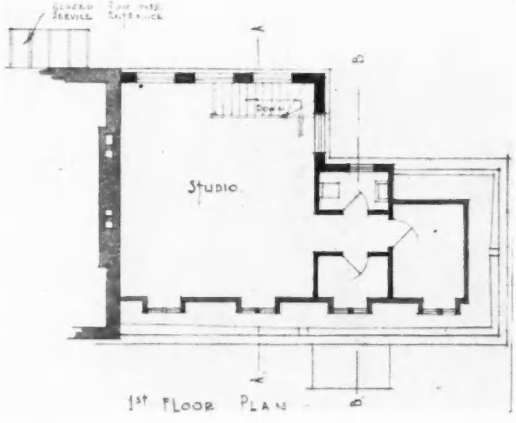
The nave cornice is particularly interesting. It seems inconceivable that the designer of it should have committed the futilities of the transept—perhaps the latter has been tampered with. The balustrade is broadly and well designed; the panels below it seem excellently placed and proportioned. The colour of the church is rich red-brown with white dressings; all the facing is of stone.—[H. S. GOODHART-RENDEL.]

SHOWROOM ADAPTATION: NORTH AUDLEY ST., W.

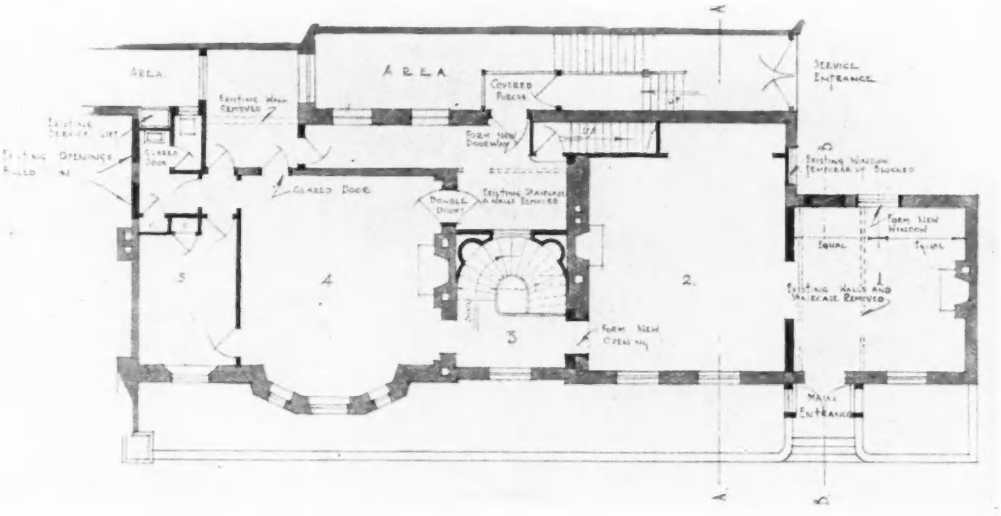


ARCHITECTS: FOR REPLANNING AND DECORATIONS, MEWES AND DAVIS; FOR ALTERATIONS, COLLCUTT AND HAMP.

THE work illustrated on this and the following two pages consisted in the adaptation, for the purposes of showrooms, studio, etc., of an existing stone building at the north-west corner of Grosvenor Square and North Audley Street. The portion concerned, in North Audley Street, had formerly been the Chancery of the Chilean Legation, and forms a separate and independent building, with a trade entrance at the rear, in Lee's Mews. Most of the basement and the whole of the ground floor have been arranged as showroom space, for the exhibition of lighting fixtures and metal work, and a feature of the replanning is the staircase connecting these two floors, to which the illustrations on the following page are devoted. Above, the first floor has been converted into a large and light studio, to be utilized for the accommodation of the designing staff.

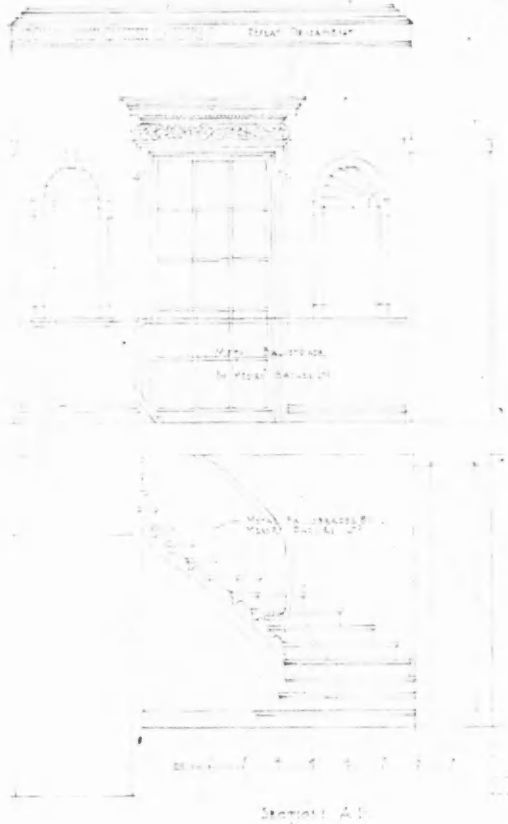


The view at the top of this page shows the frontage to North Audley Street: the portion concerned extends from the right—where Lee's Mews, which furnishes a rear trade entrance, is to be seen—to just beyond the bay-window feature on the left. Below are the ground- and first- floor plans, with new work dark in tone.





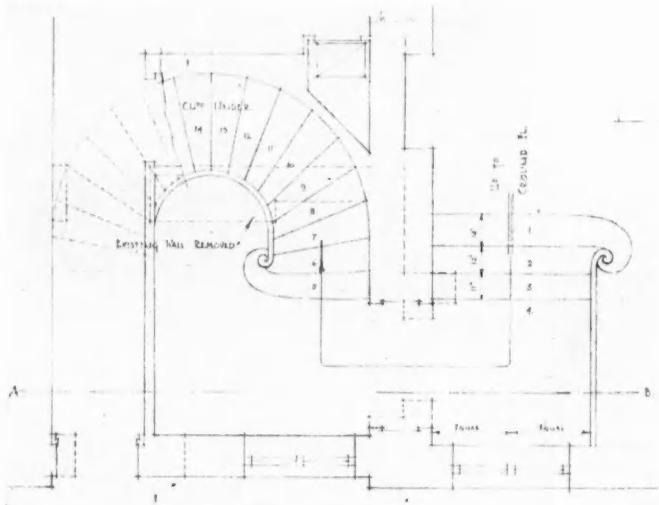
Showroom adaptation : North Audley Street, Grosvenor Square, W.

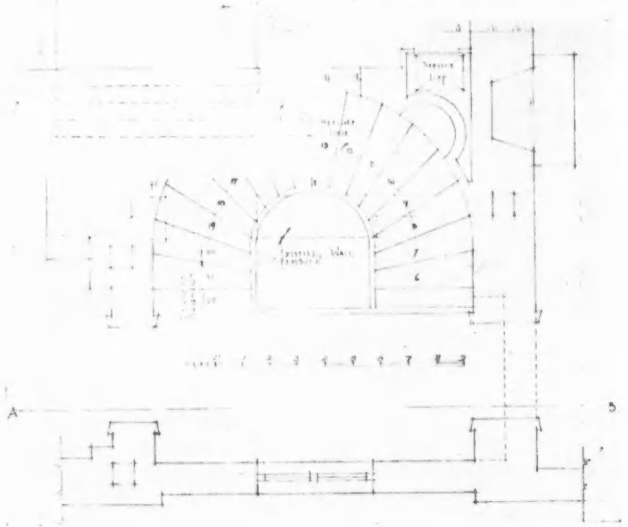


The formation of a new staircase leading from the basement to the ground floor is an important feature of the interior work. Comparison of the architects' drawings of plans (basement : left ; ground floor : right) and section with the two photographs, taken at basement and ground-floor levels respectively, will show that it has been slightly modified in matters of detail in the course of execution.



Architects : for replanning and decoration, Mewès and Davis ; for alterations, Collcutt and Hamp.





In one of the basement or lower ground-floor showrooms, showing, in the foreground, the short length of stairway illustrated to the right of two of the drawings given on the facing page.



Showroom adaptation : North Audley Street, Grosvenor Square, W.

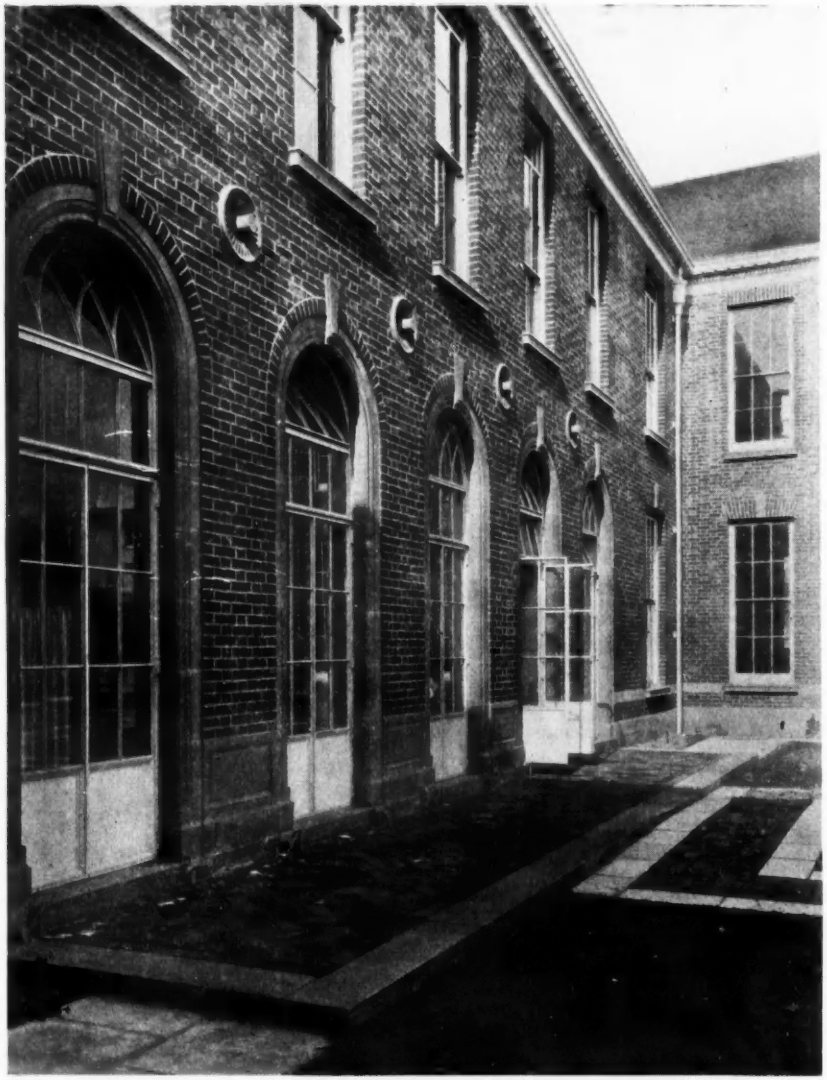


The entrance hall on the ground floor, looking through into the room numbered 2 on the plan. The window, on the right, and the wall with opening, on the left, are new.

Architects : for replanning and decoration, Mewes & Davis ; for alterations, Collcutt & Hamp.

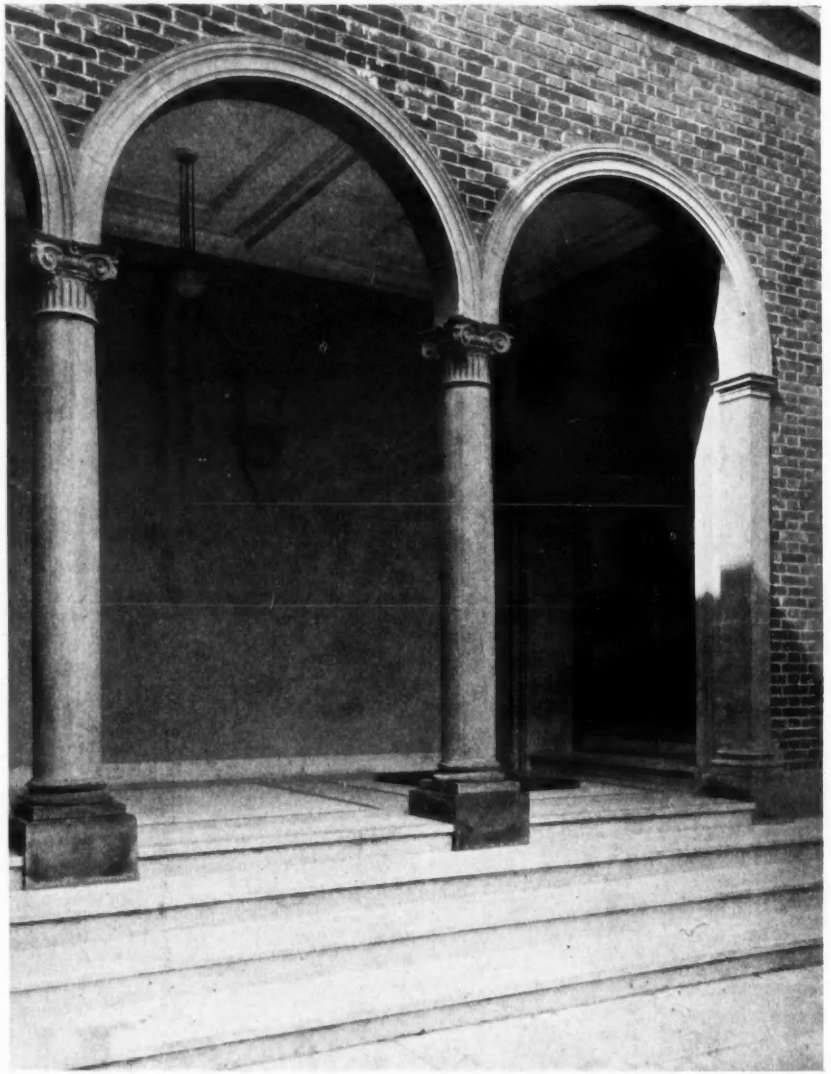


The south showroom on the ground floor, numbered 4 on the plan, with a glimpse, through the doorway on the right, of the head of the main staircase, and, through the farther door, of the north showroom (number 2).



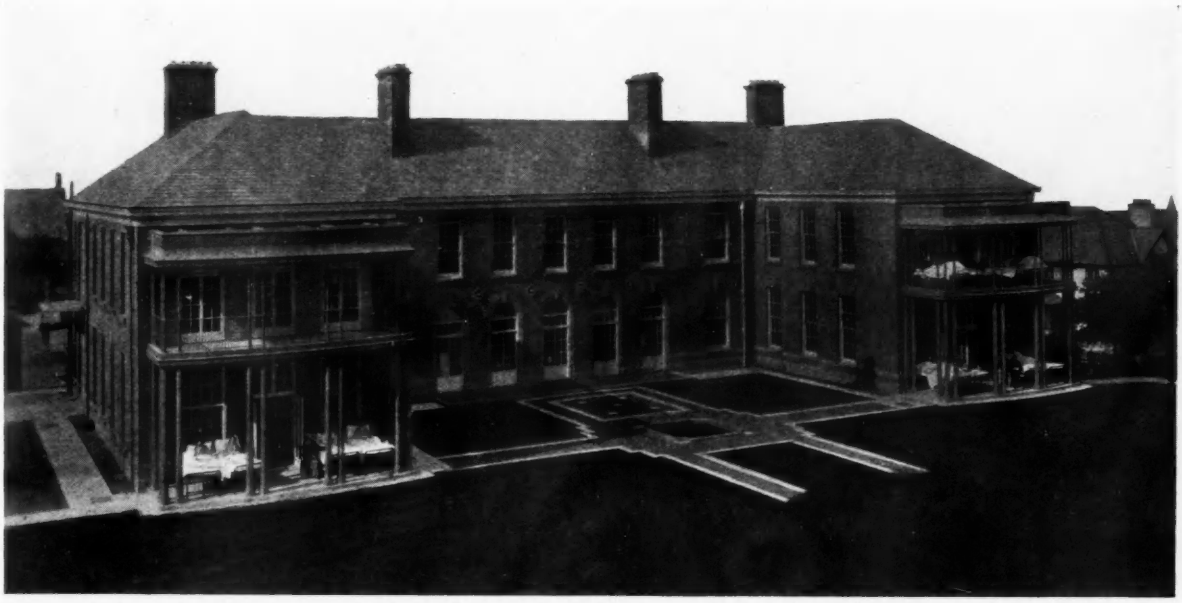
Colwyn Bay Hospital.]

Between the wings, the south front, of which a general view appears on the facing page, is occupied by the children's ward, of which the five french windows are here shown, and by two private wards, one in each corner; on the floor above are five private wards.



[*By S. Colwyn Foulkes.*

The main entrance is on the east side, backing on to the corridor connecting old and new blocks, and takes the form of a triple-arched portico approached by a short flight of steps. The double doors on the right give immediate access to the administration hall.



The south front, showing the sun balconies to the women's and men's surgical wards which occupy both floors of either wing.

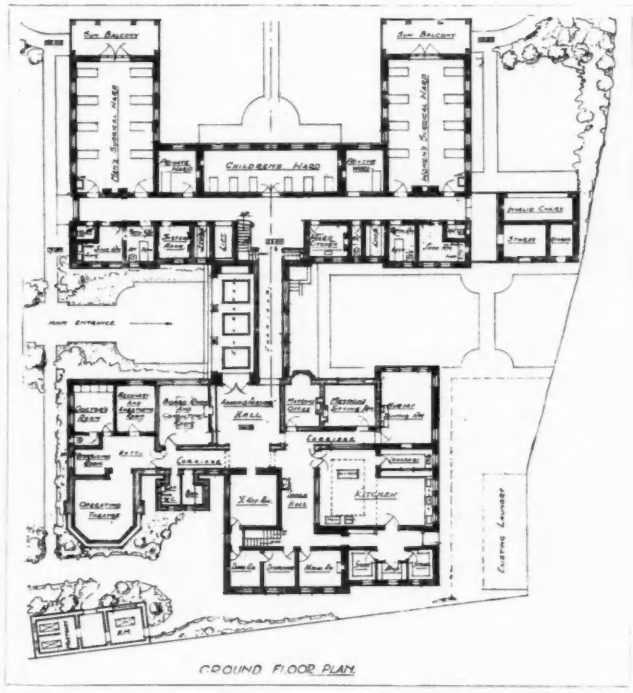
NEW HOSPITAL BLOCK IN NORTH WALES

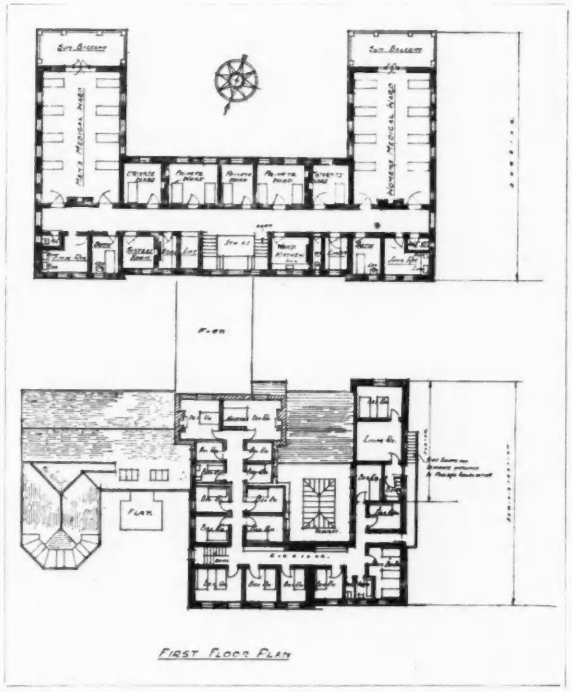
DESIGNED BY S. COLWYN FOULKES

What is now the Colwyn Bay and West Denbighshire Hospital was opened in 1890 as a cottage hospital for twelve beds. This nucleus was gradually extended until the accommodation rose to eighteen beds, and subsequently a first-class operating theatre was added in 1912.

After the war, an extension was required to bring the accommodation up to sixty beds. In the present scheme the existing building and the theatre were left as much as possible without alteration and turned into administration quarters, the patients all being moved out into a complete new nursing block, accommodating the sixty beds, and connected to the old, or administrative block, by a sloping corridor.

A point of interest in the planning of the new block is the arrangement of all the utilities on the north sides of transverse corridors on both floors.





From these architects' plans, the arrangement of the new block, occupying the upper portion of the drawings, with utility services concentrated on the north sides of the transverse corridors, and also the ground-floor corridor connecting the new building with the old—now administrative offices—can be clearly followed. But some details of the work have been altered during its progress.



The single-floor, top-lit corridor connecting the old building with the new. The main entrance doors are to the extreme left of the picture.

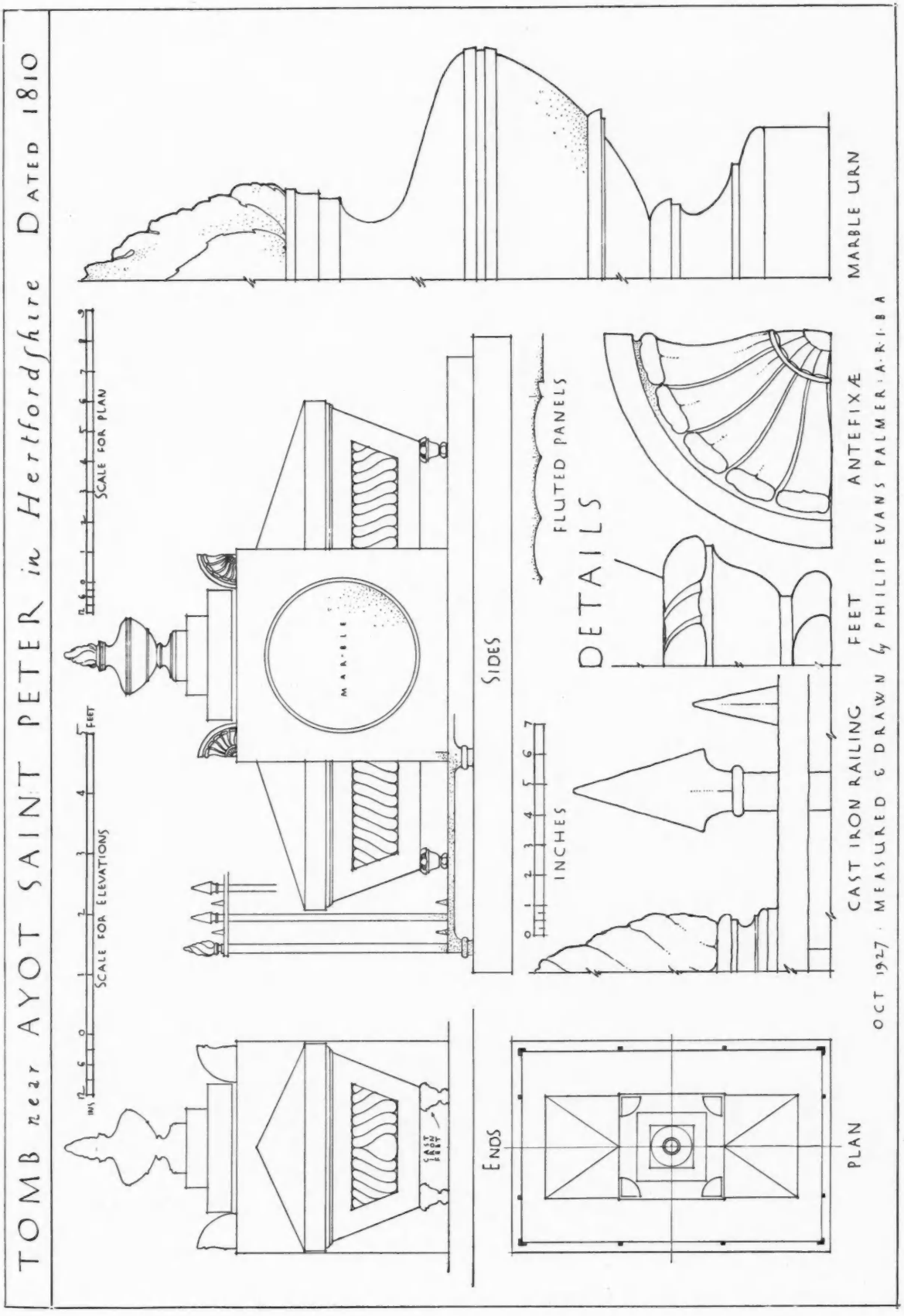


In the main transverse corridor, on the first floor, looking eastwards. The stairhead is visible on the left. Wards lie to the right and services to the left.



Colwyn Bay Hospital.] [*By S. Colwyn Foulkes.*

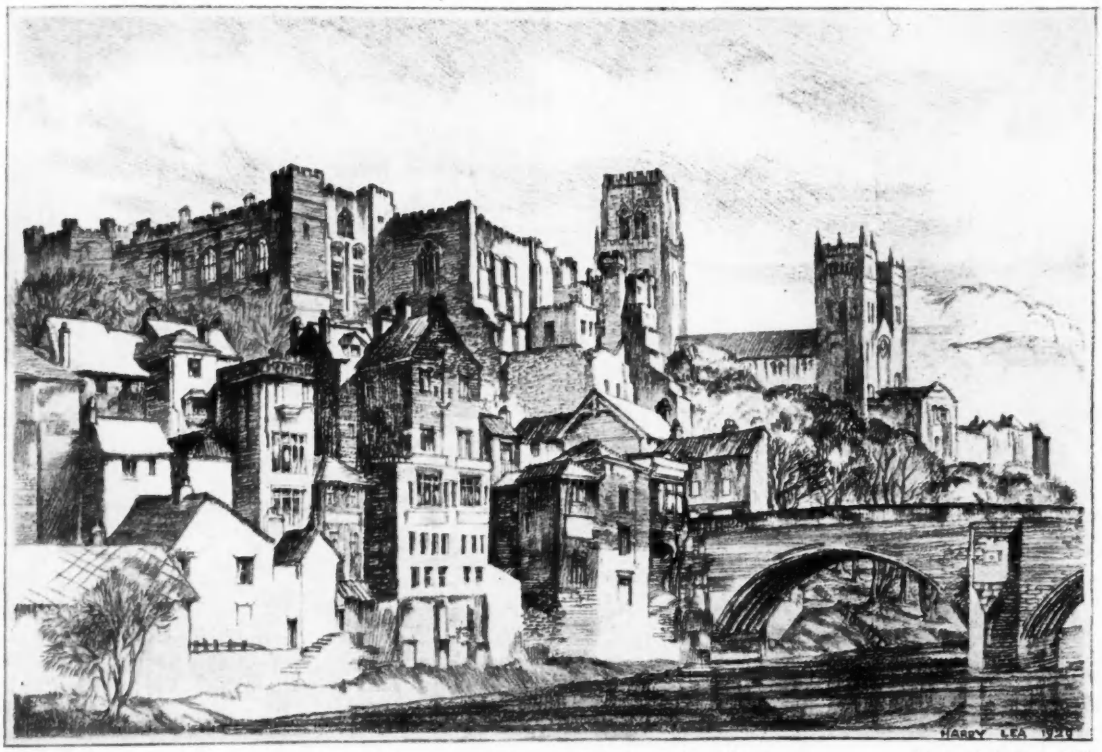
In the main transverse corridor, on the ground floor, looking eastwards. The same general arrangement is followed as on the floor above; on the left is seen a corner of a ward kitchen.


TOMB near AYOT SAINT PETER in Hertfordshire DATED 1810
SCALE FOR ELEVATIONS
SCALE FOR PLAN
SIDES
ENDS
PLAN
DETAILS
FLUTED PANELS
INCHES
CAST IRON RAILING
FEET
ANTEFIXÆ
MARBLE URN
OCT 1927 · MEASURED & DRAWN by PHILIP EVANS PALMER A.R.I.B.A

R.S.A. INDUSTRIAL DESIGNS COMPETITION

SOME EXHIBITS AT THE IMPERIAL INSTITUTE, SOUTH KENSINGTON

REVIEWED BY KINETON PARKES



R.S.A. Designs Competition.] *Durham Castle. Pencil drawing by Harry Lea (Wallasey).* [*Imperial Institute, S.W.*

An important advance this year consists in the introduction of actual works in the material, apart from mere paper designs. There are actual pieces of pottery and painted glass. The sense of form can only be developed by the feeling of the material. You cannot design a bowl unless you handle the potter's clay, or a grille unless you beat the iron into shape. It is impossible to build a house on paper; it must be done in bricks or stone or wood. Attempts have been made in previous competitions to confine genius to a graphic expression; neither genius nor expression has emerged, nor was such an emergence to be expected. In all the drawings submitted in these competitions, and especially in the purely architectural ones, there has been constant evidence of the ignorance of those who have never carried out an actuality, or helped to. The designs have been made for carrying out by others and consequently have been ineffective. Only one thing could have been asked of the designers and that is that they should have submitted ideas. This they have not done.

The lack of ideas and the need of experience of materials accounts for the non-success of the competition so



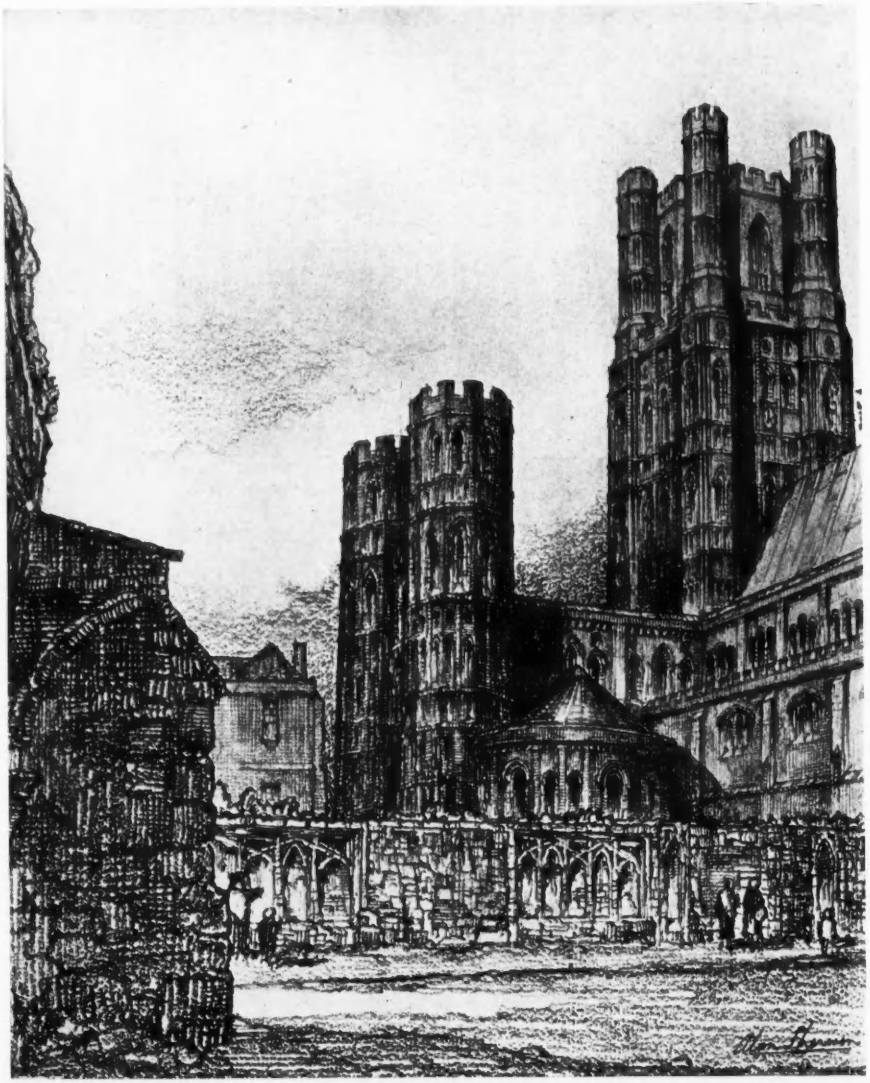
R.S.A. Designs Competition.] [*Imperial Institute, S.W.*

Winter. Painted window by Miss Jean Paisley (Edinburgh College of Art).



R.S.A. Designs Competition.]

St. Mary-le-Bow Church. Pencil drawing by Frank Starling (Bartlett School of Architecture, London University), awarded a prize of £20.



[Imperial Institute, S W.

Ely Cathedral. Pencil drawing by Alan Sherwin (Nottingham). In this year's competition 1,219 competitors submitted 3,669 designs



R.S.A. Designs Competition.] [*Imperial Institute, S.W.*

Winter. Painted window by Walter Cook (Edinburgh College of Art).

far. It could hardly be otherwise. In the case of the Lewis Berger scholarship for decorative painting, eighteen people applied for forms, but only three returned them, and of those but one completed the routine by sending in his work. Seeing that the prize is £60 and the subject of the simplest, the result cannot but be regarded as lamentable. It is due to the mere fact that an actuality was required, which seventeen of the prospective decorators funked. It is better, perhaps, to make a bad piece of work well, than a good piece badly. If this could have been realized earlier a better result than is now apparent might have been achieved at an earlier stage. This is now being realized, apparently, and the rigid adherence to drawings having been modified, direct work is now given a chance. It is not to be expected that a proscenium front shall be produced at such an exhibition, and even a painted glass window is a big undertaking, but the exhibition is most tolerable where it is most direct. There are pencil drawings of architectural subjects which are quite admirable; painted glass and ceramic decoration which are quite practical and quite good. But this admirable advance is, surely, checked by the demand that the works which secure the prizes shall become the property of those offering them. Few young designers can afford to carry out a piece of pottery on such terms, much less a painted glass window, however small.

Architecturally the exhibition at the Imperial Institute (east entrance) at South Kensington is quite ineffective; generally it is an approach to actual craftwork that gives it value. The Royal Society of Arts, and its helpers, have been as generous in the way of prizes as they have been optimistic. It is only to be expected that some disappointment must result, and the reason for it lies in the detestable imitative tradition pursued in most of the art schools of the country. The exhibition is crowded with copies from the art magazines and the hoardings; with bad reproductions of the worst forms of contemporary, showy, and ostentatious architecture; with deteriorations of the Tottenham Court Road style. The furniture designs are really bad. One exception among the art schools proves the rule: the Edinburgh College of Art set out to understand not only the rules of the competition, but the spirit of it. Consequently the college has secured most of the prizes, amounting to more than £100, but, unfortunately, not in the direction of architectural decoration. Architecture was not, as such, specified this year, which is to the good, but such decorative adjuncts as cinema proscenium walls, firegrates, and gas stoves, to mention no others, have not evoked any but disappointing designs, and certainly no new ideas.

Professor Richardson on Decoration

The annual convention of the Incorporated Institute of British Decorators was held at Painters' Hall, Little Trinity Lane, London. The president, Mr. C. A. Hindley, occupied the chair.

Professor Richardson, in addressing those present, said that to his mind the term "Decorator" meant something more than that of a plumber or paperhanger. It meant an artist who paid attention to detail, a man of taste and of culture. Decoration in his opinion should be the ruling passion of our lives and the one thing that matters.

He advised students not to despise simplicity, but to show restraint in their designs and to avoid the chimera of so-called modernism. He said that fashionable stunting was all wrong. If we had good style in place of new fashion, it would be something uplifting. Modern art has little or no structure and bears no relation to the best of present-day life.

If, he said, we compared this year of grace 1929, with the corresponding year a century ago, we should be mildly surprised. If we had been walking about London or the country in 1829 we should have found nothing to offend the eye. Everything was orderly, there were few advertisements, and nothing ugly. With the rise of industry, riches increased, and all ranks of the community began to participate in things. Then came the demand for copies of acknowledged masterpieces and, for a time, things artistic went to the dogs. But two or three great decorators, namely, Stevens, Morris, and others, kept the lamp burning. It was thought, he said, a few years ago, that if the fine principles and qualities of craftsmanship could be extended, something would have been done to revive the art of the decorator. Thanks to the foresight of the Incorporated Institute of British Decorators, those principles are once more part of the system of teaching at University College.

LITERATURE

ART AND NATURE

So interesting is a book recently published in Germany—*Urformen der Kunst*—that an English edition has just been issued under the title, *Art Forms in Nature*. Professor Karl Blossfeldt's photographs are his mainstay, for the development of his thesis is left largely to the illustrations, there being over a hundred superb plates. One has always had a horror of what is called "Art photography," feeling, with the reviewer of Whistler's work that, "there are things in painting that even a photographer cannot understand." Nevertheless, in presenting these absolutely "straight" portraits of plants something has been achieved which is on a very high plane indeed.

The introduction states that "Professor Blossfeldt, of the school for pure and applied art in Berlin, has, in hundreds of exposures of plants, without retouching or artistic effect, solely through enlarging them several times, brought home to us the relationship between natural forms and those created by the human mind." From the title of the book and after glancing through the plates we expect something more definite than this, but, perhaps fortunately, the author does not attempt to analyse or explain the relationship. He merely gives us the opportunity of observing the similarity for ourselves, and drawing our own conclusions.

The resemblance of these natural forms to those used by artists, either as pure form in architecture or as applied decoration in other fields, is certainly striking. The various enlarged photographs of "Equisetum," for instance, have more than a passing resemblance to the turrets and minarets with which we are familiar, whilst other plants find themselves the unsuspecting prototypes of ironwork and tracery.

Karl Nierendorf, who is responsible for the letterpress, points out that at the present time mankind is turning to Nature as a reaction from artificiality; that he is finding relief from materialism in sport and the worship of sunlight, in an architecture of light and air. The atmosphere of the age, therefore, is favourable to a closer study of Nature than ever before. Perfected photography, moreover, makes this possible, and the use of the microscope gives us an even greater insight into the plant world.

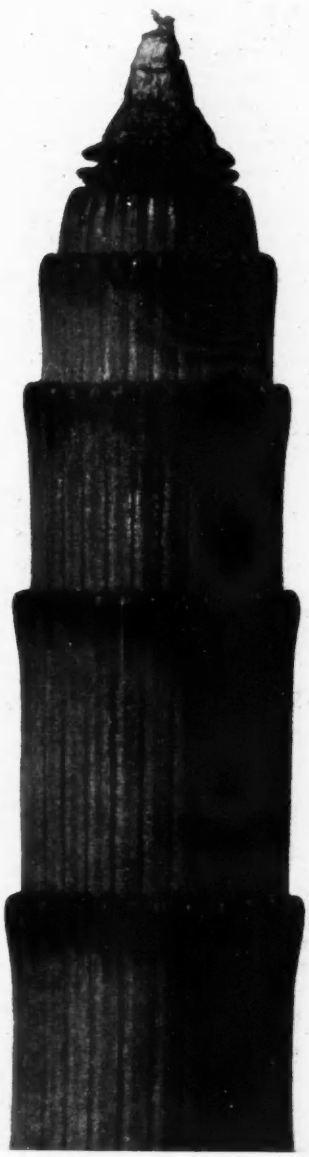
Certainly Professor Blossfeldt has made the most of these new opportunities, and we must be very grateful for what he has done. The book should be a great success in its English edition, particularly with those who will delight in the forms for their own sakes, and will not try too hard to make comparisons or to draw conclusions.

HAROLD TOMLINSON

Urformen der Kunst. Photographische Pflanzenbilder von Professor Karl Blossfeldt. Herausegegeben mit Einer Einleitung von Karl Nierendorf. Berlin, W.8. Verlag Ernst Wasmuth A. G. English edition, *Art Forms in Nature*, A. Zwemmer, London. Price £2 2s. net.

THE GOTHICK NORTH

Without the explanation provided by the author, this book might elude definition. Nominally and formally the first of three volumes upon "medieval life and thought," with special reference to tapestries and miniatures, it proves on reading to be an essay in descriptive prose, enlivened by some autobiography, and undertaken and finished as a holiday from poetry. The first chapter, on "Choosing a Subject," makes its motive plain. Neither the Gothick nor the Gypsy is more to Mr. Sitwell than an excuse for prose, and a sympathetic criticism must begin by the admission that about Gothick, about gypsies, about tapestry even, except for the description of some scenes that the loom has created, we hear little. The description of visible things has always delighted him; it gave some of his best pages to *Southern Baroque Art*, and again it is description rather than criticism or information that is here provided.



Equisetum hiemale. Winter horsetail: enlarged 12 times. [*From* Urformen der Kunst.] *See also frontispiece.*

Though the colours of old tapestry can be so brilliant that paint itself loses brightness in comparison, tapestry—the word, the art—suggests a world at a further remove; figures and events in a remoter existence; a dream within a dream, compared with painting. Now it happens that Mr. Sitwell's prose has some of this quality. His figures and his subjects dissolve into his medium; the argument is crowded by the detail; the style is like an intricate stitch. One fancies, therefore, that tapestry must have a peculiar appeal to him, that he should delight in descriptions of it, that he may have a keener response to woven pictures than many people. In love with the decorative and the picturesque, with the pomp of a pageant or the procession of a hunt, with the plumes of the knight and the devices of heraldry; exclusively concerned with the delight of the eyes, eyes to which people even are chiefly interesting for their place in the landscape of memory, he turns to those corners of art which are least fashionable. The subject is no more to him than the cartoon is to the professional weaver. The good works of the intellect daily produce so many dull, if sometimes informing, books that the reader who is fatigued by facts or by thought, the reader to whom prose is a pleasure, will welcome the change.

Here is an example of his treatment of architecture:

> . . . in the abbey of Vézelay there are the finest sculptures in Europe. This latter building has that supreme merit of not attempting a façade, for most certainly no such experiment could hope to succeed, as an introduction to what lies within. There is the more reason for this because the inside takes the form of an interior within an interior, there being a great porch in which processions were to collect and form before they marched through the sculptured door into the church beyond. This doorway is the most wonderful triumphal arch ever invented or conceived for . . . every species of triumphal and intoxicating march has been worked into its stone until the sacred figures

themselves tread and dance to those fiery measures. . . .

There is no room to complete the passage, but its appeal is to the ear, and the eyes of the writer linger on what they see with a caress that is almost manual.

OSBERT BURDETT

The Gothick North : The Visit of the Gypsies. By Sacheverell Sitwell. Duckworth. 8s. 6d.

EARLY CHURCH ART IN NORTHERN EUROPE

"It is one of the main principles laid down in the history of art that wood architecture can never be monumental. It is a temporary expedient, we are told, or a substitute, having no essential character of its own, and therefore the historian of art may neglect it, as in fact he does. I hope that this state of affairs may soon be altered, if only scientific methods are employed and opinions are not formed on a foundation of ignorance!"

These words are a statement of Professor Strzygowski's faith, and his book is one of the first examples of the scientific methods that he desires. He backs his belief with vigorous argument and enormous learning. He claims that, prior to the surge of architectural forms in stone that came to the west first with Rome and then with the Catholic Church, an even more vigorous and living architecture in wood was naturally developed among the Slavs of the Balkans and Central Europe and among the Teutonic nations around the Baltic and North Seas.

He emphatically denies the statement, so often repeated that we have come to accept it as true, that wooden architecture is merely a translation of stone form into a convenient and handy material. After a careful study of surviving examples he has classified the principal methods of construction and traced for each its history and development.

"Blockwork" or full-timber construction is typically Slav, and fine examples still survive in Russia, Ruthenia, and the Ukraine. The earliest examples of this form in Europe are the little-known timber churches of Croatia which, unlike the great stone cathedrals of neighbouring Serbia, owe nothing whatever to Byzantium, but trace their descent, via Armenia, to a far more ancient source.

"Framework," which later developed into half-timber construction, reached its greatest development in Germany and England and, far from being a copy of stone originals, was a living and vigorous form long before stonework came on the scene. So also in Ireland. From the scanty literary records left, he traces its descent to the ancient "halls" of the Germanic chieftains and the pagan temples of the Teutonic and Slavic gods—Triglav, Svantevit, and Thor.

It is interesting, in this connection, to compare the description of Attila's great hall given by Priskos and quoted by Gibbon. The builders of this were obviously not Greeks nor Romans, nor yet the tent-dwelling Huns. It is clearly an early example of Slavonic wood architecture.

"Stavework," the third of Professor Strzygowski's styles, is peculiar to Norway, and owes many of its most original features to the lessons taught by shipbuilding. Several fine examples of churches of this type built as early as the twelfth century are still in existence, despite the rigours of the Norse climate and the impermanent nature of the material.

Many of the characteristics which we regard, for example, as typically Gothic, the contribution of the northern nations to the architectural tradition of the south, have been derived from the native wooden architectures. Possibly even the open, windowed walls of the great Gothic cathedrals, as at York, could be traced eventually to the influence of frame building.

It is impossible in a short review to quote all the interesting and provocative ideas inherent in Professor Strzygowski's theses. However, after reading his book one feels a certain sympathy with Venantius Fortunatus, Bishop of Poitiers, who visited the Rhine about A.D. 560:

"Wall, built of stone, begone! I esteem higher the work of the craftsman in wood. In their mass the great timber palaces strike the sky, and in the firmly-built structure no chink can be seen. However sure a protection is stone, gravel, limestone or clay, yet here a propitious wood has of itself built the house."

L. F. EDWARDS

Early Church Art in Northern Europe. By Josef Strzygowski. Batsford. £1 1s.

The London County Council has made by-laws under section 53 of the London County Council (General Powers) Act, 1927, with respect to the demolition of buildings within the administrative county of London (excluding the City of London). The by-laws provide that every person shall, in relation to the demolition of a building in London (unless such building is more than 20 ft. from a public way or public open space and more than 40 ft. from any other building) comply with certain prescribed rules, in order to prevent nuisance arising from dust. Penalties are prescribed for offences against the by-laws. They are subject to confirmation by the Minister of Health, and will apply to the whole of the administrative county of London, excluding the City of London.

LAW REPORT

RIGHT TO ACCESS AND QUIET ENJOYMENT. ALLEGED NUISANCE

Vanderpant v. *May Fair Hotel Co., Ltd. Chancery Division. Before Mr. Justice Luxmoore*

This action raised two important points of law in regard to the questions of access and quiet enjoyment of residential premises.

The plaintiff, Mr. Harry S. Vanderpant, a barrister, of 62A Curzon Street, Mayfair, sought an injunction against the May Fair Hotel Co., Ltd., to restrain their servants or agents from the alleged obstruction of the public highway opposite his house so as to cause a nuisance, and from committing a nuisance by noise arising at the hotel from shouting and loud talking or the handling of kitchen or domestic utensils, milk churns, and other articles.

Mr. Gavin Simonds, K.C., for the plaintiff, said that Curzon Street ended in a *cul de sac*, where Lansdowne Passage connected Berkeley Street with Curzon Street. The plaintiff's house was at the eastern end of Curzon Street, where the roadway ended. The May Fair Hotel had a frontage of 15 ft. on Curzon Street, which was made to serve as a channel to provide a goods and staff entrance. That part of Curzon Street was often blocked by vans delivering goods to the hotel. In substance the plaintiff's two grievances were that the highway was being obstructed, and that the noise emerging from the kitchens, extending till the early hours of the morning, was a nuisance. The noise began in the early morning, with the delivery of milk at 6 a.m., and the arrival of the staff. The departure of the staff as late as 2 a.m., and sometimes later when there were balls, was noisy enough. At one time milk churns were rattled all the way down Lansdowne Passage from Berkeley Street, and then rattled down Curzon Street. Recently there had been some improvement, the churns being delivered in the yard and dropped on to rubber pads. Even so there was considerable noise and vibration. The plaintiff acquired his house at great expense in 1919, and had spent a considerable sum in making it perfect.

Evidence having been called in support of the plaintiff's case,

Mr. Farwell, K.C., for defendants, contended that there was not sufficient evidence of obstruction. There was no evidence of damage to the plaintiff, or to show that the defendants were responsible for any obstruction there might be. He submitted that the company were not liable if persons delivering goods at the hotel occasioned an obstruction. Decided cases

proved that the unloading of goods in the street was not necessarily an obstruction. He did not suggest that there was no noise from the kitchen of the hotel. A business of that kind could not be carried on without a certain amount of noise, but he contended that the noise was not such as to constitute a legal nuisance. It was not more than most people who lived in London had to put up with.

Evidence was given in support of the defendant's case.

His lordship in a considered judgment said that before the hotel was built Curzon Street was an exceptionally quiet and peaceful spot. A month after the hotel was opened the plaintiff wrote to Sir Francis Towle, the managing director, complaining of both obstruction and noise. He said that the disturbance began before six o'clock in the morning with the delivery of milk, and was followed by the unloading of other provisions, giving the east end of Curzon Street the appearance of a goods yard. Vans stood side by side, the plaintiff said, waiting to be unloaded, and obstructed the entrance to his house. Sir Francis Towle replied that there must be a certain amount of noise in the conduct of an hotel, but that he desired to do everything that was possible to minimize the plaintiff's inconvenience and disturbance, and had given strict instructions to that effect. Subsequent to that Mr. Vanderpant complained on several occasions. The public had the right of free and unobstructed passage over the whole of a public highway, but the person occupying premises abutting on to that highway was entitled to make reasonable use of it for the purpose of obtaining access to his own premises and for the purpose of loading or unloading goods at his premises. The right of the public, however, was a higher right than that of the occupier, and if the use of the occupier, though reasonable so far as the particular business conducted, did in fact cause an injurious obstruction to the public, then the private right of the occupier must yield to the public right. The present action was by a private individual, and he (his lordship) was of opinion on the evidence that there had been no unreasonable obstruction of the plaintiff's access, and that his claim failed so far as that part of the action was concerned.

On the question of noise, every person was entitled as against his neighbour to the comfortable and healthful enjoyment of his own premises. That matter was to be determined according to the plain, sober, simple notions obtaining among English people. There was no doubt that the defendant company had done what it could to minimize the noise, but it was impossible to say that the carrying on of a large kitchen would not make a considerable noise. The noise from the hotel kitchen in the present case was plainly heard in the dining-room and the bedrooms of the plaintiff's house, and it undoubtedly constituted a nuisance of which the plaintiff was entitled to complain. The evidence further satisfied him that there was a nuisance caused in the early morning by some of the staff leaving, and later by the arrival of the staff and the milk and ice. There would be an injunction to restrain that noise between 10 p.m. and 10 a.m., and an injunction in general terms with regard to the kitchen noises, the operation of the latter injunction being suspended till October 31. Neither party would have any costs.

READERS' QUERIES

LEVEL FOR CINEMA FLOOR

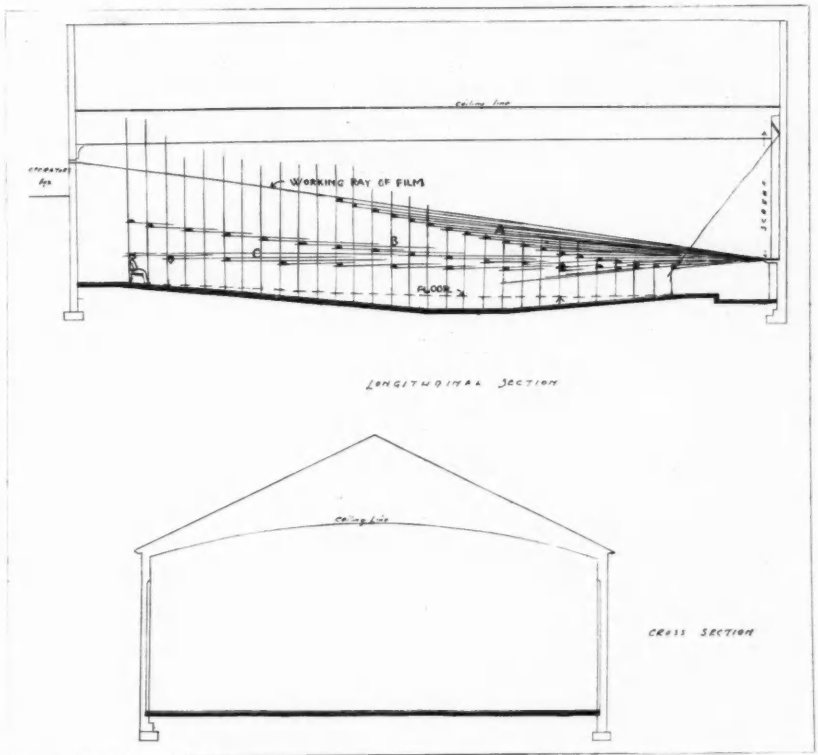
Subscriber writes: "Which is the ideal level for the floor of a picture-house with an auditorium 100 ft. long? It is proposed to make the floor run down and up, and to have the screen 5 ft. over the floor, with the orchestra some 12 in. below the floor level."

The outlines of three positions of seats have been drawn on the diagram with each eye and head at the same distance from the floor. No one wears a hat or has a bigger head than his neighbour.

Scheme A: This gives a reasonably good view of the pictures, each eye being brought up to the height of a ray of light passing over the head of the next man in front and just reaching the foot of the screen. A little more curvature might be given to make up for the difference in the sizes of people, except for the fact that the seating gets into the way of the film one-third of the way towards the back of the hall. No sinking would be necessary with seats at this rational height, the floor rising in the reverse way to what is usually shown as "the parabolic curve" in the textbooks. Seating is seldom so good as this, though it is mainly a question of money that such a scheme is not given.

Scheme B: This is not so good as A, since one man's head is seen in the line of the picture. The theory that one head can be arranged for in taking one's seat is counted on in this practical scheme. A slight sinking is noteworthy near the orchestra.

Scheme C: This complies with the conditions of the diagram at the back—by accident. It is worse than B; and far worse than A, because two heads interfere in the way of seeing the picture instead of one in the case of B, and none in the case of A. There is a marked sinking in the floor under the seventh seat, but nothing like



Longitudinal and cross sections of level for cinema floor. The outlines of three positions of seats are shown, with each eye and head at the same distance from the floor.
[*See answer to* Subscriber *on this page.*]

the sinking shown in the original diagram; the floor goes down 6 in. instead of 2 ft. as first planned.

"Which is the ideal level for the floor of a picture-house with an auditorium 100 ft. long?" would certainly not be answered readily from the present example. The curve of seating giving every spectator an uninterrupted view of the whole screen—A—would undoubtedly claim first position if the operators' box could be dealt with in a suitable fashion and if the ceiling were also suitable: at present the spectators would be squeezed in by the roof. If it is desired to deal with the floor more or less as it is for inlets and exits a plan something like C would have to be adopted.

Incidentally, the whole question is wrapped up in the size of the screen; if this were to commence 6 ft. over the floor instead of 5 ft., it might be possible to defend a steep downward slope at the orchestra end as scheme C, and welcome the steeper slope up to the back as something like scheme B. But the height is given as 5 ft. and has been worked to in all cases. The real thing to note is the value of actual height dropped in the length of the seats; if the back could be 5 ft. higher we should have scheme B instead of scheme C. The difficulty of turning one's head up is against any steep slope down in front of the picture.

W. H.

EFFLORESCENCE ON INTERIOR WALLS

R. D. J. writes: "Twelve months ago I completed a building. In the interior a special plaster was used throughout. The external walling was cemented and whipped with gravel. All sand was heated to exclude salt. In certain parts of the building on the interior of the exterior walls only, white patches of fluffy substance come out constantly, and when removed by hand this is much like flour. Is this due to the use of sea sand unheated, or to the chemical products of the plaster? Dampness originally penetrated the walls where these patches occurred, owing to faulty putlog holes. That dampness has been cured, but the fluffy substance still appears. Can you suggest a remedy?"

The efflorescence may arise from many causes other than the use of sea sand. To determine the actual cause chemical examination should be made of the sand and other materials used. Indeed, it is probable that the trouble may proceed from the clay used in making the bricks. Its presence suggests that moisture penetrates the walls. Remove the cause of the moisture, and the efflorescence should cease, but a very little damp will cause it. If I were in your correspondent's position, I should get to work outside.

N. L.

SOCIETIES AND INSTITUTIONS

ARCHITECTS IN STRAITS SETTLEMENTS

According to an official list recently published, architects of all nationalities registered in the Straits Settlements total seventy-four.

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS

At a meeting of the Council of the above Association Messrs. Augustus John, R.A., and Alfred C. Bossom, F.R.I.B.A., were elected vice-presidents of the Association. Sir William Orpen, K.B.E., R.A., etc., and Mr. P. A. László, M.V.O., R.S.P.P., were elected honorary members.

BUILDING COURSES FOR TEACHERS

The Board of Education recently organized a fourteen-days' meeting of upwards of a hundred teachers engaged in technical colleges and schools of art throughout England and Wales. Lectures and demonstrations were given at the Westminster Technical Institute by selected building education inspectors. The lectures covered six days' intensive study of the main subjects included in a course of building construction. Conducted tours were made to Welwyn Garden City, St. Alban's Cathedral, and the new laboratories of the Forest Products Research Station at Princes Risborough. Many new buildings were visited and special lectures on building practice and materials were given at the Carpenters' Hall.

PROBATIONERSHIP OF THE R.I.B.A.

The Council of the R.I.B.A. have decided to accept a certificate of having passed one of the public examinations recognized for the probationership, R.I.B.A., without requiring that the examination shall have been passed in any particular subjects, but they will require all candidates, except those who produce a certificate of having passed one of the recognized public examinations with credit in drawing, to submit with their applications for registration drawings showing that they possess some knowledge of drawing. A list of the recognized public examinations may be obtained free on application to the secretary, R.I.B.A., 9 Conduit Street, London, W.1. All candidates who are unable to submit certificates of general education in accordance with this regulation may make special applications for registration as probationer which will be considered on their merits by the Board of Architectural Education.

BRITISH ENGINEERING RESEARCH

Professor Lea, speaking at the meeting of the British Association for the Advancement of Science, held in South Africa, said that research is now being undertaken by many manufacturers at great expense and the public finally reap the benefit. It would appear that in a matter of such vital concern to industry and the community more rapid progress could be made and a much bolder progress pursued if public organizations and large power distributing companies and authorities accepted the responsibility of the provision of funds for research.

The only hope of solving many of the problems which face the engineer today, he said, is by organized experiment. Engineering is of such importance to modern life that not only manufacturers, but large users, public authorities and governments must be interested and provide funds for research.

ARCHITECTS' SUMMER MEETING

About thirty-five members and friends attended the summer meeting of the Northamptonshire, Bedfordshire, and Huntingdonshire Association of Architects. The party met at the George Hotel, Kettering, and then visited Messrs. Timpson's boot and shoe factory. Mr. R. J. Williams, F.R.I.B.A., the architect of the factory, acted as guide. Adjoining the factory, which is well arranged and excellently lighted, are lawn-tennis courts, bowling-greens, and ornamental gardens for the enjoyment of the employees. After luncheon at the George Hotel the company went by motor-coach to Lyddington, where the church and Bede House were visited. The wood-panelled ceiling and magnificently carved cornice in the Bede House were much admired. Some of the architects present were greatly interested in the construction of the floor of the main hall, which was of a type still to be found in some of the old buildings of the district, viz. lime concrete and reeds supported on wood joists. Kirby Hall was next visited, where the company speculated as to exactly where the work of John Thorpe and of Inigo Jones began and ended and as to who was responsible for the removal of the original windows of the entrance front and their replacement by others. The next stop was at the Sea Horse, Deene, where the president, Mr. R. J. Williams, entertained the party at tea. After tea the house and grounds of Deene Park, the seat of the Brudenell family, were visited, by the kind permission of the owner, Mr. G. L. T. Brudenell. Thomas Brudenell was created Earl of Cardigan in the reign of Charles II, and there are many reminders to be seen in the house of the Lord Cardigan who led the Charge of the Light Brigade. After a visit to the church, the party returned through Weldon and Geddington.

TRADE NOTES

An order for cement, amounting to over £150,000, has recently been placed by the Halifax (Nova Scotia) Harbour Commission with the Lafarge Aluminous Cement Co., Ltd. The cement ordered, namely, Ciment Fondu, will be used for the construction of a large pier at the ocean terminals in Halifax, and operations are to be commenced immediately by Mr. A. G. Tapley, chief engineer to the Commission. Ciment Fondu is claimed to be impervious to the corrosive action of sea water and will enable the new pier to be constructed within the shortest possible time.

A map of France showing the actual condition of the roads under four classifications has been issued by the A.A. The reverse side is devoted to plans of ports from which steamship services operate, together with summarized information regarding sailings.

The fourth edition of *Europa Touring* has also been published. This book describes eighteen European countries, is written in English, French, and German, and contains over 130 maps and plans. One of its interesting features is a comprehensive gazetteer covering the principal European cities and towns. Price 10s.

Mr. Fred J. Henson, manager of the Technical and Research Bureau of the Red Triangle Cement Organization, has been appointed a director of the Portland Cement Selling and Distributing Co., Ltd., Ship House, 20 Buckingham Gate, S.W.1. Mr. Henson served his articles in England, and for two years was a borough engineer here. Seeking broader experience, he emigrated in 1910, and, first in Canada and then in the United States, was engaged on varied works of constructional engineering. As city engineer of Mitchell, South Dakota, he was responsible for building the Mitchell Corn Palace. The palace is used for all manner of public meetings, the auditorium holding 7,500 people. Before joining the Red Triangle Cement Organization, Mr. Henson was an official of the Portland Cement Association of America, and in practical touch with the developments in the use of concrete on " the other side."

Messrs. Lumbys, Ltd., of Halifax, have placed on the market a new solar sectional domestic boiler. A particular feature of this boiler is the wide waterway, which measures $7\frac{1}{2} \times 5$ in. outside. This is claimed to increase considerably the water capacity and, in consequence, the boiler itself becomes an auxiliary cylinder, by reason of providing extra storage capacity. The increased volume of water in the boiler is claimed to ensure a more uniform temperature, even when drawing off. The cleaning-doors of each section are so placed that a cleaning bar or chisel can be inserted in the top manhole, and passed right out of the bottom mudhole, making the removing of scale a comparatively simple matter. The boiler is provided with waterways below and under the fire-bars, and the construction is claimed to ensure a perfectly free and uninterrupted circulation from one side to the other. Additional 2-in. tapped holes are put in the back and front sections in order that a further flow can be taken off the back or front and the return can be put in a similar position at the bottom, in which case it is only $3\frac{1}{2}$ in. from the floor to the centre. When the return is required in the side of the boiler, and in a low position, one of the mudhole covers can be provided with connections. and in this case the measurement is only $6\frac{3}{4}$ in. from floor to centre. The boilers are constructed of Steelite metal varying from $\frac{3}{8}$ in. to $\frac{1}{2}$ in. in thickness. They are made for two different test pressures, 75 lb. and 125 lb., the latter being particularly suitable for high buildings, with heavy head pressures. The sections are tested individually, and when assembled, to the respective pressures. When fixed in soft-water districts the boilers can be treated by the Bower Barffling process.

THE BUILDINGS ILLUSTRATED

Following are the specialists, contractors, and some of the sub-contractors for the buildings illustrated in this issue:

Bagues House (pages 275-7). Surveyors: Selby and Saunders. Heating and ventilation adviser, Mr. Musgrave, of Crittalls. General contractor, J. W. Falkner. Sub-contractors: Pilkington Bros., Ltd., patent glazing; Comyn Ching & Co., central heating; W. J. Smith, electric wiring and electric heating; Bagues, Ltd., electric light fixtures, metalwork, and door furniture; Samouelle, Ltd., plumbing; Elliott and Sons, stairtreads; Luxfer Prism Syndicate, iron shelter; Paul Turpin, general architectural decoration and decorative plaster; Rodier, Paris, silk material on walls; J. A. Eshelby, Symonds and Lutyens, and Acton Surgey, furniture; Roneo, office fittings; Bagues, signs.



A new solar sectional domestic boiler constructed of Steelite metal.

Colwyn Bay and West Denbighshire Hospital (pages 280-2). General contractor, Joseph Davies, who was also responsible for the demolition, excavation, and foundations. Sub-contractors: Clegg and Son, stone; Hutchison & Co., slates; Pilkington Bros., glass; W. Freer and Son, cast lead; Hollis Bros., wood-block flooring; Kleine Flooring Syndicate, Ltd., patent flooring; Matthews and Sons, general heating; Well Fire Co., grates and mantels; Drake and Gorham, Ltd., electric wiring, electric light fixtures and bells; Musgrave, Ltd., sanitary fittings; Art Pavements and Decorations, Ltd., stair-treads and tiling; Laidlaw and Thomson, door furniture; J. B. Johnson, plaster; D. J. Williams, metalwork.

COMPETITION CALENDAR

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

23709. Baines, J. Building construction. August 2.

23554. Lean, H. J. Spring balancing devices for sliding sash windows, &c. July 31.

23734. Whittingham, J. Window hinges. August 2.

23342. Swain, W. E. Fireplaces. July 30.

SPECIFICATION PUBLISHED

316382. Lyne, R. J. Moulds or forms for monolithic concrete building construction.

ABSTRACT PUBLISHED

313791. Klockner-Werke Akt.-Ges. Abteilung Mannstaedtwerke, Troisdorf, Cologne, Germany. Window frames.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The FINCHLEY U.D.C. has passed plans submitted by the Ritz Cinema and Entertainments, Ltd., for the erection of a cinema at Ballards Lane, corner of Ridgeway.

Plans passed by the LAMBETH B.C.: Alterations and additions, 68 to 86 Clapham Road, for Mr. E. W. Wallis; buildings, 103 Stockwell Road and Broomsgrove Road, for Mr. P. A. Hamilton; flats and shops, South Lambeth Road and Binfield Road, for Messrs. Yates, Cook and Darbyshire; porch at proposed nurses' home at Lying-in Hospital, York Road, for Mr. E. Turner Powell.

Plans passed by the FINCHLEY U.D.C.: Four houses, Nether Street, for Mr. W. Hollis; garages, Deansway, for Oakwood Tenants, Ltd.; house, Allandale Avenue, for Mr. P. Preston; extension to electricity sub-station, Regent's Park Road, for the U.D.C. Electricity Committee; house, Grey Close, for Mr. W. S. Gibson; alterations, Ballards Lane, for Kiwi Polish Co.; alterations and additions, 12 High Street, North Finchley, for Messrs. Cullen; shops, offices, and flats, Station Approach, Ballards Lane, for Mr. W. Hollis; four houses, Ossulton Way, for Oakwood Tenants, Ltd.; two houses, Litchfield Way, for Mr. G. Kentish; additions, St. Michael's, Hendon Lane, for the Venerable Archdeacon Vernon Smith; extensions to dispensary, King's Parade, Ballards Lane, for Mr. R. J. Pickles; six houses, South Crescent, for Messrs. Rainbird and Scarfe; two houses, Village Road, for Messrs. Aird and Baldwin; two houses, Hill Top, for Mr. A. Reast.

As the site is required for development purposes, WOOLWICH Borough Council propose to close down the open-air market in High Street, Eltham.

At a meeting of the ILFORD Corporation Electricity Committee, the borough engineer submitted sketch plans, prepared in collaboration with the borough electrical engineer, of the proposed new offices and central show and storerooms on the Clark's Road site, and he was directed to prepare further detailed plans and estimates in connection therewith.

The Hanover Street L.C.C. School, ISLINGTON, is to be rebuilt at a cost of £35,621.

Plans passed by the MARYLEBONE B.C.: Building at Great Portland Street station for Mr. C. W. Clark; flats, Maida Vale and Hall Road, for Messrs. John Knox and Dyke, Ltd.; building, Oxford Street, Orchard Street, and Granville Place, for Messrs. Trehearne and Norman.

The Church Army has acquired a site in Beresford Street, WALWORTH, for a housing scheme.

The WIMBLEDON Corporation has purchased a housing site in Faraday Road.

Messrs. Spiers, Ltd., are to erect a church hall for St. Peter's Presbyterian Church in Beechcroft Road, BALHAM.

SOUTHERN COUNTIES

The Surrey Education Committee has approved plans for improvements and extensions at Hersham School, WALTON-ON-THAMES, at a cost of £9,000. Sketch plans have also been approved for the erection of an infants' school at an estimated cost of £14,150.

The COULSDON U.D.C. is making inquiries for sites, for the erection of further houses.

Plans passed by the COULSDON U.D.C.: Five houses, Hilltop Road, for Messrs. E. O'Sullivan, Ltd.; eight houses, St. Andrews Road, for Mr. H. J. Salter; house, Coulsdon Rise, for Mr. H. C. Doddrell.

Plans passed at SANDERSTEAD: Twenty-nine terrace houses, Grange Road, for Mr. N. H. Jones; alterations and additions, Old Post Office, Limpsfield Road, for Mr. A. E. Allison; house, Beechwood Road, for Mr. J. R. Webster; butcher's and grocer's shops, and flats, Addington Road, for South Suburban Co-operative Society; eighteen houses, Addington Road, for Mr. H. Johnson; house, Brancaster Lane, for Mr. W. J. Frewing.

Plans passed at PURLEY: House, Purley Bury Avenue, for Mr. W. J. Frewing; house, Selcroft Road, for Mr. S. C. Kirby; bungalow, Downscourt Road, for Mr. E. Sabey; club premises and hall, Whyteleafe Road, for Purley Men's Club; house, Hartley Downs, for Mr. G. F. Fox; house, Hartley Old Road, for Mr. W. H. Finn; five houses, Woodcrest Road, for Mr. N. A. Harvey; house, Hartley Old Road, for Mr. F. A. Freeman; alterations and additions, 16-18 High Street, for Messrs. Stevenson and Rush, Ltd.

The Surrey Education Committee has prepared plans for extensions at the WIMBLEDON Technical Institute at a cost of £13,270.

The Board of Education has approved the plans of the Surrey Education Committee for the erection of a central school at CARSHALTON at a cost of £35,500.

The Board of Education has approved plans of the Surrey Education Committee for the erection of a central school at BEVERLEY, MALDEN, at a cost of £23,250, and a central school at WEST MALDEN at a cost of £15,750.

The Surrey Education Committee has decided to proceed with the erection of a permanent school providing accommodation for 624 children in two departments, a central mixed for 240, and a junior mixed and infants' for 384 at PURLEY. The estimated cost is £30,800.

The Board of Education has approved the plans of the Surrey Education Committee for the erection of a secondary school at FRIMLEY. The cost is estimated at £32,000.

The Surrey C.C. has purchased land on the Connaught estate, BROOKWOOD, for a new reception hospital.

The OXFORD Education Committee is to acquire 15 acres of land in Marston Road and 25 acres of land on Rose Hill for the erection of schools.

The GRAVESEND Corporation is to carry out a system of main drainage in the Pelham Road area at an approximate cost of £42,000.

Plans passed by the GRAVESEND Corporation: Shop, Bath Street, for Mr. E. W. Filkins; bungalow, Central Avenue, for Mr. V. G. Dean; additions, 75, and rebuilding 75a and 76 High Street, for Mr. E. W. Filkins; six houses, Central Avenue, and two houses, Ridgeway Avenue, for Mr. H. L. Smith; six houses, Park Avenue, for Mr. T. Bennett; alterations, 35 Bath Street, for the Gravesend Hospital authorities; store, 11 Windmill Street, for Messrs. S. G. Allen and Son; seven houses, Pinnock's Avenue, for Mr. T. Bennett; six houses, Arnold Road, for Mr. C. A. Reid; four houses, New House Lane, for Mr. G. E. Clay.

The GUILDFORD borough engineer has prepared a preliminary plan for the erection of sixty-four houses on the Shepherds Hill estate.

The GUILDFORD Corporation has obtained sanction for a loan of £5,050 for the erection of fourteen houses in Southway Avenue.

Mr. A. C. Burlingham is developing an estate at Galghill, GUILDFORD, where twenty-five houses will be erected.

The proposed cost for the erection of a secondary school at DORKING, for the Surrey Education Committee, is estimated at £49,000.

Plans passed by the FARNHAM U.D.C.: Two bungalows, Runfold, for Mr. A. J. Lehman; house, Buller's Road, Weybourne, for Mr. J. E. Trimming; cottage, Stickhams Lane, for Messrs. Punter and LeClercq; two cottages, Woodcut Wrecclesham, for Mr. W. White; house, Stephendale Road, for Messrs. A. J. Figg and Son; alterations, Hereford Cottage, Hale, for Comdr. S. Bacon; additions, Lanefoot Cottage, Lower Bourne, for Mr. I. Forbes Robertson; classrooms, Farnham Girls' Grammar School, for the Surrey Education Committee; alterations, Marlborough Head, for Messrs. Courage & Co.; two cottages, Weydon Lane, for Mr. H. S. Burningham; alterations, Congregational Church, for Mr. A. J. Stedman.

The Board of Education has approved the plans of the Surrey Education Committee for the erection of a central girls' school at BARNES at a cost of £23,660.

The PORTSMOUTH Education Committee is seeking the sanction of the Board of Education for the use of a site at Gladys Avenue for the erection of an elementary school.

Messrs. Dagnall Bros. are to erect thirty-five houses in Hillingham Road, GRAVESEND.

The Surrey Education Committee is to prepare plans for extensions at Tadworth School, BANSTEAD.

The Surrey C.C. has purchased Frosbury Farm, 93 acres of land, at WORPLESDON, for the provision of further small holdings.

Plans passed by the PORTSMOUTH Corporation: Alterations, Kepples Head, Portsea, for Mr. A. E. Gurney; alterations, 46 High Street, for Messrs. Charpentier, Ltd.; parsonage, off Battburgh Avenue, for St. Mark's Church Council; shop, Thomas Street, for Portsmouth and Brighton United Breweries, Ltd.; dairy depot, Copythorn Road, for Co-operative Society; business premises, London Road and Oriel Road, for Messrs. Timothy Whites, Ltd.; additions to church, Edinburgh Road, for Rev. Mr. Davies; two shops, High Street, Cosham, for Mr. A. A. Cater; alterations and additions, Majestic Cinema, for Mr. R. W. G. Stokes; flats, St. George's Square, for Portsmouth Housing, Ltd.; four houses, Chatsworth Avenue, Cosham, for Messrs. G. and W. Mitchell; shop and house, Kirby and Copnor Roads, for Mr. F. Elliott; four shops, Copnor Road, for Messrs. Tanner Bros.; shop premises, Lake Road, for Mr. W. R. T. Willers; alterations, Apollo Cinema, Albert Road, for Apollo Theatre, Southsea, Ltd.; warehouses, Cressy Place, for Brunswick Dyeing and Cleaning Co., Ltd.

The PORTSMOUTH Corporation is acquiring land at Eastern Road for a housing scheme.

A site in the old Quoit Ground in Victoria Park has been selected by the PORTSMOUTH Corporation for the erection of a new mortuary.

The PORTSMOUTH Corporation Hospitals Committee advises that an architect practising in the city be appointed to prepare plans for the erection of a mental colony at Portsdown Hill, the layout to be on the villa system and with accommodation for 500 patients.

The EASTBOURNE Corporation is considering the acquisition of a site in Elm Grove for the provision of a branch library.

The EASTBOURNE Corporation has approved plans of proposed alterations to the Redoubt scheme in order to meet the objections of the Chatsworth estate.

The deacons of the Richmond Hill Congregational Church are now to proceed with the scheme for the erection of a church at Priory View Road, BOURNEMOUTH.

Plans passed by the BOURNEMOUTH Corporation: Shops and dwellings, Southbourne Road, for Mr. H. Whiting; alterations, 18 Commercial Road, for Messrs. F. W. Woolworth & Co.; additions, 370-2 Holdenhurst Road, for Messrs.



Pair of cottages, Glenfield, Leicestershire, for Sir Samuel Faire. Designed by E. J. Williams. The exteriors are roughcast with slate roofs.

Berry and Wood; extensions, Aberdare Hall, Spa Road, for Mr. A. J. Wilkins; additions, Carlton Hotel, East Cliff Drive, for Bournemouth and District Properties Co., Ltd.; additions, St. Michael's Church, Poole Road, for churchwardens; nine houses, Calvin Road, for Mr. F. A. Roscoe; four houses, Elmes Way, for Messrs. Bunning Bros; four houses, Claremont Road, and two bungalows, Brockenhurst Road, for Mr. S. G. Ward; eight houses, The Grove, for Mr. F. Moorman; three houses, The Avenue, for Mr. H. Cherrett; ten houses, Athelstan Road, for Mr. H. F. Alger; flats, shops, and garages, Stafford Road, for Mr. C. R. Blissett; shops and flats, Charminster Road, for Mr. E. C. Brown; three houses, Kimberley Road, for Mr. Aston; alterations, 36 Commercial Road, for Messrs. W. Timpson, Ltd.; eighteen houses, Covena Road, for Messrs. M. Brown and Sons; five houses, Carbery Avenue, for Mr. W. J. Clarke; two houses, Grenfell Road, for Mr. T. Fry.

SOUTH-WESTERN COUNTIES

The Dorset Education Committee is to erect a girls' school in Queen's Avenue, DORCHESTER.

MIDLAND COUNTIES

The BIRMINGHAM Education Committee has voted £20,000 for the erection of the Thornton Road council school; £4,000 for the extension of the Hall Green council school; £1,800 for the erection of Marsh Hill open-air school; £23,000 for the extension of the Erdington Secondary School; and £26,500 for the erection of the Sparkhill junior commercial school.

The foundations of NOTTINGHAM'S new £46,000 secondary school for girls are already being dug on the Forest Fields site, Gregory Boulevard, and the school is expected to be completed in about eighteen months. Three-quarters of the site of 41,720 square yards, surrounded on three sides by a fringe of new houses, is to be used for playing-fields and playgrounds. The school will occupy the north-east corner, near the junction of Leslie Road and Austen Avenue.

Plans passed at HANLEY: Alterations, Lord John Russell Inn, Waterloo Street, for Messrs. Bass, Ratcliffe and Gratton; additions, Parliament Row, for Messrs. F. G. Rhodes, Ltd.; warehouse, Newcastle Road, for Messrs. Twyfords, Ltd.; alterations, Dew Drop Inn, Marsh Street, for Messrs. Worthington & Co., Ltd.; alterations Lamb Street, for Barclays Bank, Ltd.; additions to café of Regent Theatre, Piccadilly, for Provincial Cinematograph Theatres, Ltd.; two kilns, Excelsior Works, for Johnson Fireclay Co., Ltd.

Plans passed at BURSLEM: Two houses, Sneyd Street, for Mr. J. Jackson; two houses off High Lane, for Mr. E. A. Bird; alterations, Dolphin Inn, Church Street, for Messrs. Parker's Brewery, Ltd.; sixteen houses, Milton Road, for Mr. J. Jackson.

Plans passed at TUNSTALL: Two houses, High Lane, for Mr. C. Sutton; two houses, High Lane, for Mr. A. Walker; two houses, High Lane, for Mr. C. Kearton; additions, Victoria Pottery, High Street, for Messrs. A. Meakin (Tunstall), Lts.; two houses, Sneyd Street, for Mr. J. Cartlidge; twelve houses, Greenbank Road estate, for Mr. A. Perry.

Plans passed by the STOKE-ON-TRENT Corporation: Estate development off Werrington Road, for Mr. E. Cotton; eight houses, Kingsfield Oval Basford, for Messrs. Stephen Heath and Son; two houses, Penkull Street, for Messrs. Till Bros.; four houses, Hilderstone Road, Meir, for Mr. H. P. Pointon; two houses, off Stone Road, Trentham, for Messrs. T. Horwill & Co.; two houses, Riseley Road, Hartshill, for Messrs. Geo. Evans and Sons; two houses, New Inn Lane, Hanford, for Messrs. Burt and Perrin; Church hall and Sunday school, Kingscroft, for St. Matthew's Mission trustees.

NORTHERN COUNTIES

The BARNSLEY Corporation Parks Committee has asked the borough engineer to prepare a scheme for the layout of the old reservoir, Huddersfield Road.

The BARNSLEY Corporation Housing Committee has asked the borough engineer to prepare a scheme for the erection of an additional 100 three-bedroom houses and fifty-two bedroom houses on the Burton Grange estate.

Plans passed by the BARNSLEY Corporation: House and shop, Pontefract Road, Monk Bretton, for Mr. W. Davies: extensions, Old Mill Lane, for The Yorkshire Paper Mills, Ltd.; oil store, Perseverance Street, for The Barnsley British Co-operative Society, Ltd.; additions, Carlton Road, Smithies, for Mr. M. E. Birkinshaw.

The HULL Corporation has obtained sanction for a loan of £20,270 for the layout of the cemetery extension at Marfleet Lane.

The LEEDS Corporation has obtained sanction to borrow £120,000 for the erection of shops, offices, and a colonnade in Guildford Street.

Sanction has been obtained by the LEEDS Corporation to borrow £18,500 for the erection of fourteen houses and forty-eight flats on the Meanwood housing estate, and £51,750 for the erection of 176 flats and four houses on the Middleton housing estate.

The OTLEY U.D.C. has asked the surveyor to prepare plans for approximately 100 houses to be erected on the Westbourne extension site.

The LEEDS Education Committee has received sanction to borrow £114,420 for the erection of new buildings for modern schools for boys and girls.

The MANCHESTER Corporation Housing Committee has passed a block plan for 970 houses to be erected on the housing estate at Chorlton.

The OLDHAM Corporation has asked the Baths Committee to prepare a scheme for the erection of public washhouses at Hollinwood.

Plans passed by the MANCHESTER Corporation: Warehouse, Charles Street, Donald Street, and Makin Street, Chorlton-upon-Medlock; alterations and additions, Bull's Head Inn, Ashton Old Road and Barmouth Street, Openshaw; additions to iron foundry, Victoria Street, Openshaw; two shops and twenty-two houses, Westbourne Range, Turnbull Road, Ashfield Grove and Essex Road, Gorton; addition to home, Cheetham Hill Road, Cheetham; printing works, Waterloo Road and Allison Street, Cheetham; fifteen houses, Hilldale Avenue and Coldstream Avenue, Blackley; four shops, Nicolas Road and Oswald Road, Chorlton-cum-Hardy; thirty-six garages, Cundiff Road, Barlow Moor Road, Chorlton-cum-Hardy; bank, Salde Lane and Portland Road, Rusholme; hostel, Lower Park Road, Rusholme; public baths, Barlow Road, Levenshulme; alterations, "Queen's Arms," Queen's Road and Topley Street; additions to Millstone Inn, Blackley New Road and Mill Brow, Blackley; alterations to Oswald Inn, Rochdale Road and Paget Street; additions to Vale Mills, Blackley New Road and Mill Brow, Blackley; alterations, "Langdale Hall," Upper Park Road and Denison Road, Rusholme; twelve shops and houses, Barlow Moor Road, Mottram Avenue, and Hardcastle Avenue, West Disbury; four houses, Egerton Road, Chorlton-cum-Hardy; additions to convent, Whalley Road, Whalley Range.

The OLDHAM Corporation has obtained sanction to borrow £106,500 for the erection of 300 houses on the Limeside estate.

The OLDHAM Corporation has passed plans submitted by the borough engineer showing proposals for the erection of a storeroom, office, and public conveniences on the Hollinwood market ground.

The BARNSLEY Corporation Hospitals Committee has further considered the question of the present accommodation of the nursing staff at the Kendray Hospital, and has asked the borough engineer to prepare plans and estimates for the erection of a nurses' home.

At a meeting of the BARNSLEY Corporation, the borough engineer submitted plans for the provision of a block for acute and advanced cases at the sanatorium, and it was decided to forward the plans to the Ministry of Health for preliminary approval.

Plans passed by the STRETFORD U.D.C.: Stores, Ayres Road, for National Corrugated Paper Co., Ltd.; drying-floor, Westinghouse Road, for Metropolitan Vickers Electrical Co., Ltd.; casting shop, Elsinore Road, for Messrs. Moir-Hill (Engineers), Ltd.; casting stores, Talbot Road, for Messrs. Parkinson and Cowan, Ltd.; digester-house extensions, Westinghouse Road, for Rubber Regenerating Co., Ltd.; additions, Seymour Park School, for Education Committee; house, Seymour Grove, for Mr. A. O. Pella.

The STRETFORD Education Committee has submitted plans for a school for 400 children at Low Moss Lane, to the Board of Education for approval.

The BOLTON Education Committee is in negotiation with the managers of St. Ethelbert's Roman Catholic School regarding a scheme for the reconstruction of the premises.

The Board of Education has passed the plans submitted by the trustees of Deane Church of England School, BOLTON, for alterations and improvements.

The BOLTON Corporation is purchasing 40 acres at Castle Hill for housing purposes.

The STRETFORD U.D.C. is seeking sanction to borrow £8,520 for the erection of a public hall, library, and washhouses at Trafford Park.

Sanction has been obtained by the BOLTON Corporation to borrow £21,420 for the erection of fifty-eight houses off Hulton Lane.

The BOLTON Corporation is to borrow £50,000 for further housing advances.

The BOLTON Corporation has obtained sanction to borrow £5,000 for the construction of the proposed golf course and the erection of a golf house at Lostock Hall estate.

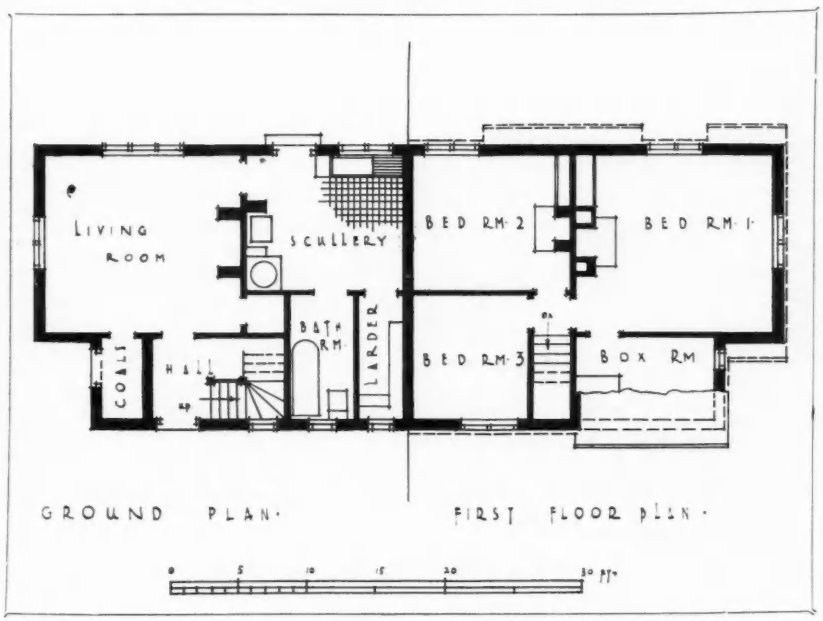
At a meeting of the WAKEFIELD City Council a discussion took place on a recommendation of the Corporate Property Committee that £65,000 should be expended on new swimming baths and a public hall, to be erected in Sun Lane, near Kirkgate. After much controversy the minutes of the meeting were adopted.

The YORK Corporation has instructed the city engineer to report on the question of the strengthening of Skeldergate Bridge, and the improvement of Castle Mills Bridge; and also to prepare a preliminary estimate for constructing a ring road between Clifton and the Scarborough Road, and also for the ring road and bridge on the south of the city.

Plans passed by the ROTHERHAM Corporation, Building, Don Street, for Messrs. Guest and Chrimes, Ltd.; alterations and additions, 20, High Street, for Maypole Dairy Co., Ltd.; shop, Cambridge Street, for Mr. A. Bewley; alterations and additions, Market Hotel, Moorgate Street, for Mr. R. Dewar; offices, etc., Ekin Street, for Messrs. McCall & Co. (Sheffield), Ltd.

MISCELLANEOUS

Plans passed by the DOUGLAS (I. o. M.) Corporation: Bungalow, Laureston Road, for Mr. W. Keig; parish hall, Selborne Road, for St. George's Church trustees; citadel, Lord Street, for Salvation Army.



Ground- and first-floor plans of a pair of cottages, Glenfield, Leicestershire. Designed by E. J. Williams. A photograph showing the exteriors is reproduced on page 292.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_1	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_2	Barnard Castle	N.E. Coast	1 6	1 1½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Broken brick or stone, 2 in., per yd.	0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0
Screened ballast or gravel, add 10 per cent. per yd.			
Clinker, breeze, etc., prices according to locality.			
Portland cement, per ton	2	8	0
Lias lime, per ton	2	0	0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.			

Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. 0 1 3
PLANKING to excavations, per ft. sup. 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
IF left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. . 0 2 1
DO. 6 in. thick, per yd. sup. . . 0 2 10
PUDDLING, per yd. cube 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 2 3 0
DO. 6-2-1, per yd. cube . . . 1 18 0
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.
LIAS-LIME CONCRETE, per yd. cube . £1 16 0
BREEZE CONCRETE, per yd. cube . 1 7 0
DO. in lintels, etc., per ft. cube . 0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube . . . 0 3 0
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . . 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3
Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	0
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	0	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra.	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ⅜ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.
PLAIN face Portland basis, per ft. sup. £0 2 8
DO. circular, per ft. sup. . . . 0 4 0
SUNK FACE, per ft. sup. 0 3 9
DO. circular, per ft. sup. . . . 0 4 10
JOINTS, arch, per ft. sup. . . . 0 2 6
DO. sunk, per ft. sup. 0 2 7
DO. DO. circular, per ft. sup. . 0 4 6
CIRCULAR-CIRCULAR work, per ft. sup. 1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run . . . 0 1 1
DO. circular, do., per ft. run . . 0 1 4
HALF SAWING, per ft. sup. . . 0 1 0
Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.
SETTING 1 in. slate shelving in cement, per ft. sup. £0 0 6
RUBBED round nosing to do., per ft. lin. £0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed 1 7 6
YORK SILLS, W. & T., ft. cub. fixed . 1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup. 0 1 3
DO. 2½ in. thick, per ft. sup. . . 0 1 6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

	Med. Grey	*Med. Green*
Portmadoc Ladies		£13 0 0
Countess		25 0 0
Duchess		32 0 0
Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0

WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	*Med. Green*
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6	7 0
Grey-green do.	5	9 0
Green peggies, 12 in. to 8 in. long	4	13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard			
Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	4
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	3
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube . . 0 4 9
DO. framed in floors, roofs, etc., per ft. cube 0 5 6
DO. framed in trusses, etc., including ironwork, per ft. cube . . 0 8 6
PITCH PINE, add 33⅓ per cent.
FIXING only boarding in floors, roofs, etc., per sq. 0 13 6
SARKING FELT laid, 1-ply, per yd. . 0 1 6
DO., 3-ply, per yd. 0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq. . 2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run . 0 0 4½
DO. 9 in. wide and over per ft. sup. . 0 1 2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 9½d. *per hour*; MATE, *do.* 1s. 4d. *per hour*; ERECTOR, 1s. 9½d. *per hour*; FITTER, 1s. 9½d. *per hour*; LABOURER, 1s. 4d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO. in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd	0	2	0

PLUMBER

PLUMBER, 1s. 9½d. *per hour*; MATE OR LABOURER, 1s. 4½d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 9½d. *per hour (plus allowances in London only)*; LABOURER, 1s. 4d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 8d. *per hour.*

Glass: Aths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1s. 6d. to 2s. per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up £0 3 0
Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1s. 8d. *per hour*; LABOURER, 1s. 4d. *per hour*; FRENCH POLISHER, 1s. 9d. *per hour*; PAPERHANGER, 1s. 8d. *per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			⅝ in.			¾ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2½	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, AUGUST 28

IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY, Imperial Institute Road, South Kensington, S.W.7. Exhibition of Royal Society of Arts Competition of Industrial Designs, 1929. Open daily until September.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Arts and Crafts." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

NATIONAL PORTRAIT GALLERY, Trafalgar Square. "Some Later Architects." By John Steegmann, M.A. **3 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Dark Races—IV." By the Official Guide Lecturer. **12 noon.**

CITY OF MANCHESTER ART GALLERY. Exhibition of Paintings and Drawings by Ernest and Dod Proctor. Open daily from 10 a.m. to 6 p.m. (Sundays, 2.30 p.m. to 5 p.m.) until September 14. **10 a.m.**

THURSDAY, AUGUST 29

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. **3 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C. "Life and Arts of the Middle Ages." By the Official Guide Lecturer. "Greek Sculpture—IV." Both at 3 p.m. **3 p.m.**

FRIDAY, AUGUST 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By L. O. Faraker. 12 noon. "Chippendale." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon.**

SATURDAY, AUGUST 31

Sunrise, 6.10. Sunset, 7.50.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Summer Tour to the Rhineland via the Ardennes and the Moselle. From the evening of August 31 to September 8 or 12.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Furniture of the Seventeenth Century." By L. O. Faraker. 12 noon. "English Furniture of the Eighteenth Century." By L. O. Faraker. 3 p.m. Indian Section: "Mogul Art." By T. F. Wilson. 3 p.m. "Eighteenth-century Furniture." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon.**

BRITISH MUSEUM, Bloomsbury, W.C. "The Romans and their Arts." 12 noon. "Life and Arts of the Middle Ages." 12 noon. Tour of the several Sections. 3 p.m. **12 noon.**

MONDAY, SEPTEMBER 2

WALLACE COLLECTION, Manchester Square, W.1. "English Portraits." By W. P. Gibson. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Costumes." By L. O. Faraker. 12 noon. "Costumes of the Seventeenth Century." By L. O. Faraker. **12 noon.**

BRITISH MUSEUM, W.C.1. "Monuments of Egypt." "Monuments of Assyria." By Official Guide Lecturers. **3 p.m.**

GOUPIL GALLERIES, 5 Regent Street, S.W.1. Exhibition of Modern Paintings and Fine Engravings of the Fifteenth and Sixteenth Centuries. 10 a.m. to 6 p.m. Saturdays 10–1. **10 a.m.**

TUESDAY, SEPTEMBER 3

LONDON SOCIETY. Visit to the Church of St. Andrew-by-the-Wardrobe, Queen Victoria Street, E.C.4. **2.30 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C. "Arts and Customs of Ancient Egypt—I." 12 noon. "Monuments of Egypt—I." 12 noon. "Monuments of Assyria—I." 3 p.m. "Arts and Customs of Ancient Egypt—II." 3 p.m. **12 noon.**

WEDNESDAY, SEPTEMBER 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

BRITISH MUSEUM, Bloomsbury, W.C. A Selected Subject. 12 noon. "Early Greece (Crete and Mycenæ)." 12 noon. "Early Age of Italy (Etruscans, etc.)." 3 p.m. **12 noon.**

THURSDAY, SEPTEMBER 5

BRITISH MUSEUM, W.C.1. "Origins of Architecture—I (Greek)." By Cecil Hallett, B.A., F.S.A. 12 noon. "Early Britain—I (Old Stone Age)." By Cecil Hallett, B.A., F.S.A. 3 p.m. **12 noon.**

FRIDAY, SEPTEMBER 6

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7 "Early English Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 7

Sunrise, 6.21. Sunset, 7.34.

BRITISH MUSEUM, W.C.1. "Early Britain—II (Late Stone Age)." By Cecil Hallett, B.A., F.S.A. **12 noon.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

MONDAY, SEPTEMBER 9

ARCHITECTURAL ASSOCIATION. Annual Excursion to Germany. Departure for Hamburg in s.s. "St. Louis."

TUESDAY, SEPTEMBER 10

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS. See entry under date of September 17, re visit to Wolverhampton.

ARCHITECTURAL ASSOCIATION. Tour to Germany. Arrival at Hamburg.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture—I." 12 noon. "Architecture—II." 3 p.m. Both by L. O. Faraker. **12 noon.**

WEDNESDAY, SEPTEMBER 11

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 12

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. **12 noon.**

INTERNATIONAL HOUSING AND TOWN PLANNING CONGRESS opening at Rome. Open until September 22. Particulars from the Organizing Secretary, Mr. H. Chaoman, 25 Bedford Row, W.C.1.

FRIDAY, SEPTEMBER 13

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Tudor and Jacobean Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 14

Sunrise, 6.32. Sunset, 7.18.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to Croydon Aerodrome. Meet main entrance 2.50 p.m. **2.50 p.m.**

TUESDAY, SEPTEMBER 17

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Pottery." By L. O. Faraker. **12 noon.**

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS. London and Home Counties Branch. Visit to Messrs. Mander Bros. Works, Wolverhampton. Meet outside entrance gates No. 3 Platform, Paddington. Depart 9 a.m. Party limited to fifty. Applications to Joint Hon. Branch Secretaries, 1 Wilbraham Place, S.W.1, before September 13.

WEDNESDAY, SEPTEMBER 18

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Metalwork." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Medieval Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

SATURDAY, SEPTEMBER 21

Sunrise, 6.42. Sunset, 7.3.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chippendale." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to Westminster Cathedral. Meet main entrance 2.15 p.m. **2.15 p.m.**

MONDAY, SEPTEMBER 23

BRITISH MUSEUM, Bloomsbury, W.C. "Arts and Customs of Ancient Egypt—II." 12 noon. "Records of Babylon and Assyria—I." 12 noon. "Greek Sculpture—I." 3 p.m. "Monuments of Egypt—II." 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. 12 noon. "Italian Renaissance Furniture." 3 p.m. **12 noon.**

TUESDAY, SEPTEMBER 24

BRITISH MUSEUM, Bloomsbury, W.C. "Early Britain—III." 12 noon. "Greek Sculpture—II." 3 p.m. "Monuments of Assyria." 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W. "French Renaissance Furniture." 12 noon. "French Eighteenth-century Furniture." 3 p.m. **12 noon.**

WEDNESDAY, SEPTEMBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W. "Early English Furniture." 3 p.m. **3 p.m.**

THURSDAY, SEPTEMBER 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Seventeenth-century Furniture." 12 noon. "English Eighteenth-century Furniture." 3 p.m. "Jade and Lacquer." 7 p.m. **12 noon.**

FRIDAY, SEPTEMBER 27

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." 12 noon. "Chinese Sculpture." 3 p.m. **12 noon.**

SATURDAY, SEPTEMBER 28

Sunrise, 6.45. Sunset 6.45.

BRITISH MUSEUM, South Kensington, S.W.1. "Monuments of Assyria—II." 3 p.m. "Greek Sculpture—II." 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. 12 noon. "Ironwork." 3 p.m. **12 noon.**

MONDAY, SEPTEMBER 30

ROYAL SANITARY INSTITUTE, 90 Buckingham Gate, S.W.1. Opening of the Autumn session of training courses for examinations for sanitary inspectors, smoke inspectors, associateship (general hygiene and sanitation), associateship (food hygiene, and sanitary science). Particulars obtainable from the Secretary at the above address.

SATURDAY, OCTOBER 5

Sunrise 7.6. Sunset, 6.30.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to London Telephone Exchanges—City, Central, and Trunk. Meet G.P.O. (South), Carter Lane, E.C.4, at 2.15 p.m. **2.15 p.m.**

MONDAY, OCTOBER 7

LONDON UNIVERSITY, Gower Street, W.C. Opening of Session.

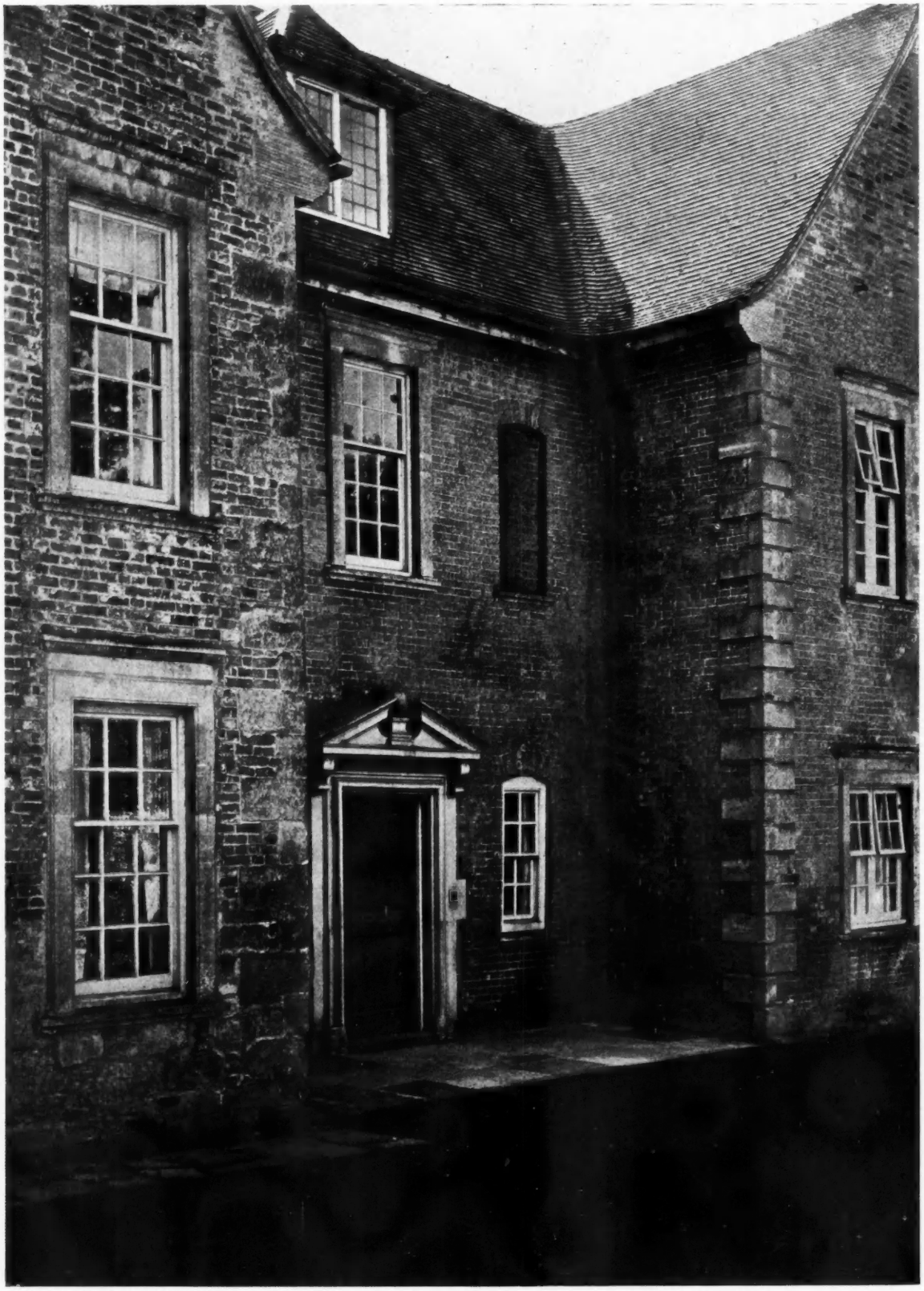
ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. Opening of Session.

THURSDAY, OCTOBER 10

BEDFORD COLLEGE, Regent's Park, N.W. Opening of Session.

THURSDAY, OCTOBER 17

ARCHITECTURE CLUB. At the London School of Economics. Supper Discussion. Report as to arrangements. **5.45 p.m.**

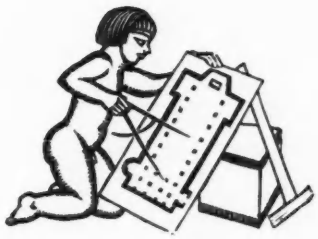


AFTER THE "TIDY-UP": FRONT ENTRANCE (CIRCA 1700), IMBER COURT, WILTSHIRE

"This is the one distinguished architectural detail the house offered. The clean, fine lines of the head, and the boldly-moulded architrave surround, are characteristic of the best of their kind and epoch."

(See the article on "Two of Mr. Basil Oliver's Jobs" on pages 313-317 of this issue.)

THE ARCHITECTS' JOURNAL



WEDNESDAY, AUGUST 28, 1929

ON THE RAILS (AND OFF)

"I con-sider," said Mr. Weller, "that the rail is unconstitootional and an inwaser o' privileges."

— CHARLES DICKENS: *Master Humphrey's Clock.*

WITH Londoners, the cry "Scrap the Trams" is both familiar and popular; unfortunately, the act would be none so simple. If all the four thousand trams were taken off the four hundred route-miles of rails tomorrow, and an additional fleet of motor buses with an equal seating capacity put on, so vast and sudden an increase of free-wheeled transport would bring traffic to a standstill.

Undoubtedly, the rigid constriction of trams to their skid-provoking steel grooves is a considerable, and often exasperating, cause of obstruction. We all know what it is to see thirty file or so of cars demobilized by some temporary defect in that delicate underground conduit system imposed by the æsthetic sensibility of South London aldermen. But impatience ought not to blind us to the real root of the trouble.

Unlike every other big city, *the tramway system of London was never planned as a whole.* It grew up bit by bit, in the teeth of opposition, to satisfy the demands of workaday dormitory boroughs for cheap road transport. Every borough of the County of London had the right of vetoing any new tramway which the L.C.C., as the statutory authority, might propose to construct along any of its streets. Thus many reasonable routes were unreasonably truncated. Furthermore, co-ordination of the intra- and extra-London systems, except in identity of gauge, hardly existed until the last few years. Even today, through running is rather the exception as between the networks separately owned or worked by no less than three county councils, four companies, and ten municipal corporations or urban district councils.

A glance at the L.C.C. folder map will show that there is a vast gap in the cobweb of lines radiating from the Embankment. The north-western and western segments, together with so much of the south-western as lies north of the Thames, have virtually no tramways marked on them, except at certain strategic "bridge-heads." The result has been a plethora of "dead-end" terminals interrupting north-south and east-west routes. There are only two physical connections between the lines north and south of the river: via the Kingsway subway, shortly to be enlarged as an afterthought to take the standard double-decked cars; and (impossible, this) via Putney, Fulham, Hammersmith, Willesden, Golder's Green, and Finchley to Highgate Archway. A mile of tramless road across the Lea marshes separates the Middlesex and Essex systems; and about the same distance the unlinked railheads of Dartford and Northfleet.

When the tracks were first put down, every line should have been part of an organic whole, laid under a comprehensive Traffic Act. The municipal short-sightedness of allowing tramways to be laid at all without a simultaneous "Haussmannization" of the main streets of inner London was little short of criminal. The untold millions that will have to be spent—and before very long, too—on wholesale replanning would then have been reduced by half, or even more. At present the kerb outline of most important thoroughfares looks like a boa-constrictor which has swallowed a succession of rabbits. The advent of the motor bus has only made matters worse, for in streets of irregular width its ubiquitous mobility is apt to be a great cause of traffic blocks.

In larger cities, and under proper operating conditions, the tram is likely to hold its own for another decade or two, for superior economy, seating capacity, and acceleration. Liverpool has indicated those conditions in some of her suburbs, by enclosing the tracks in the middle of straight and wide avenues; so has Berlin, where miniature Pullman cars run on neatly fenced strips of sward separated from one-way motor streets on either side.

Meanwhile, the Westminster City Council has lately offered a deplorable example of selfish indifference to the interests of Greater London by refusing way-leave to a useful loop-line which the L.C.C. proposed to substitute for the Victoria terminus in Vauxhall Bridge Road.

Millions have been sunk in the tram tracks; and the cold fact is they cannot be abolished until the street-plan of inner London has been drastically remodelled. Then, and then only, shall we have roads wide enough to rely on other forms of surface transport.

NEWS & TOPICS

LONDON'S NEW GOVERNMENT BUILDING

I UNDERSTAND that a large new Government building is to be built over the site of old houses in Whitehall Gardens, lying just behind Whitehall itself, and that the Office of Works are to be the architects. We need now go no farther than London for an example of the policy of allowing a Government department to design Government buildings. Enough has been said in criticism of that policy as applied to the Calton Jail site to convince me that this Government economy meets with no approval among architects and little enough among the general public. For myself I look at the Ministry of Health building, and, comparing its proportions and detail with other buildings in Whitehall, wonder how the system ever gained a foothold, and can only presume that it is a survival of the sudden access of power that came upon Government departments like a miraculous gift of tongues during the war.

*

A WELCOME HOUSING ACT

The recently passed Revision of Housing Contributions Act, 1929, is an attempt by the new Government so to stabilize conditions under which houses are built that the building industry will be enabled to carry out and expand programmes of building, which, under the curtailment of subsidy instituted by the late Government, were gradually withering away. It is a distinct reversal of existing policy, but one which will be welcomed, not so much by architects, whose share of low-priced work is astonishingly low, but by municipal and other authorities.

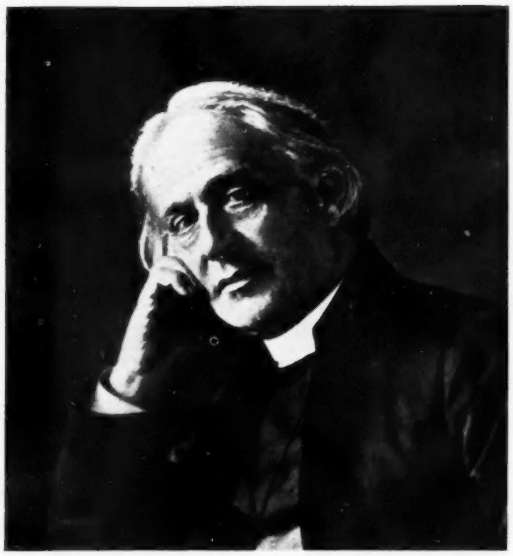
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CONCERNING ARCHBISHOP BENSON

It is to that in many ways remarkable churchman, Edward White Benson—as the Editor pointed out last week in "The Sacristy: a New Phase," when quoting the trenchant objections which the Archbishop raised before the Royal Commission of 1891 against the erection of any further buildings, *however low*, on the north side of the nave—more than to anyone else that we owe the survival of the open space in front of Westminster Abbey. Had Archbishop Benson been alive today there can be little doubt that he would have condemned the present attempt to expropriate part of this green sward, and the view it conserves, from the public, for a new annexe as vigorously as he did the proposal to use the site of the old sacristy for an additional memorial chapel which Pearson, the Abbey architect at the time, had approved. It is something of a coincidence that Benson should have been the first Bishop of Truro; and that he should have lived to consecrate, as Archbishop of Canterbury, the new Truro cathedral, of which Pearson himself was the architect.

*

The photograph reproduced here is much more characteristic of "the great dignity of bearing" of this masterful ruler of the Anglican Church, who so resolutely opposed making Westminster memorable among English cathedrals as "the one which could not be seen," than Herkomer's painfully theatrical portrait or Brock's rather stilted effigy. The best likeness of all, however, is a bust at Wellington, of which Benson was the first headmaster, executed by Hope-Pinker, a sculptor of character whose merits have not been sufficiently recognized. Archbishop Benson is probably less remembered at the present day as an outstanding primate than as the father of that trio who in Edwardian days used to be called the "brilliant Bensons": E. F., the novelist, who still survives; Robert Hugh, the Monsignor, who also wrote novels; and Arthur Christopher, the literary critic, who became master of Magdalene College, Cambridge.



Edward White Benson, late Archbishop of Canterbury, who, in 1891, opposed the addition of any building, however low, on the north side of the nave of Westminster Abbey.

*

"TRUSSING" THE PROPERTY OWNER

Property owners are suffering under a new imposition of the income-tax authorities. Under the Acts a property owner is allowed one-sixth of the annual value of the property upon which he pays income tax for repairs. Now it seems that all repairs which the authorities care to regard as improvements, as opposed to mere replacements, are disallowed, and since it is difficult to imagine any repair that does not improve the value of property, the sixth share seems to tend Treasury-wards. Add to this the effect of the Rent Restrictions Acts, which deny the right of the property owner to pass any of these costs on to the tenant, and see how neatly trussed is the man of property. This is, of course, a direct tax upon the good landlord for whom every necessary repair will have to be paid for out of his pocket, with no possibility of a just return.

*

BRADFORD'S OPPORTUNITY IN THE BALANCE

If Bradford would organize just such another competition as was instituted recently by Birmingham its shabby central area could be made the nucleus of a fine civic centre and reunited town plan. Unfortunately for Bradford the only competition it offers is for a commercial building to be erected upon a most peculiar site, the remains of an open space after the surveyor's T-square has traversed it from the direction of half a dozen converging streets.

In point of fact, the plan of the improved central area, as it emanates from the city surveyor's office, differs from the old street plan only by being formless on a much greater and more dangerous scale, and if carried out will undoubtedly remove all possibility of a really fine civic centre for this large city for all time; which seems a pity in this age of town planning and reawakened civic interest.

*

OUTLINES FOR THE COLOGNE EXHIBITION, 1932

Professor Ernst Jäckh, nominated by the Reich as general organizer of the 1932 "Exhibition of the New Age," has far-reaching plans. It is intended to commemorate the twenty-fifth anniversary of the founding of the *Deutscher Werkbund*. The choice fell on Cologne on account of its geographic position and the existence there of suitable permanent exhibition buildings, for Professor Jäckh holds that temporary buildings, with their lath and plaster "façade architecture," are obsolete. Quality, not quantity, is his aim; constructive ideas are to supersede comprehensive representation. There is no intention of giving publicity to new fashions or mere novelties. The buildings will be divided into three groups. In the first place, there will be the permanent exhibition galleries: Abel's Central Hall, and the House of the Nations. Then there will be several "Siedlungen," or permanent housing schemes, together with a number of municipal buildings to exemplify the architectural expression of the New Age. Foremost among these will be the new university, with a "Students' Street," 600 metres long, linking it with the University Hospital at Lindenburg, and a strip of land laid out with gardens as a permanent "festal meadow." Finally, there will be various national pavilions all typical of modernist design intended to emphasize national peculiarities.

*

The exhibition proper will be divided into a cycle of seven sections: 1: The Face of the World; 2: The Evolution of Man; 3: The Conquest of Matter and Power; 4: Buildings and Housing; 5: Regional and Town Planning; 6: Forms of Government; 7: The Future Ordering of the Universe. It will be seen that ideas rather than bald facts are the order of the day. It is hoped that leading personalities may be induced to co-operate in an international ymposium on the trend of future progress, and also that a plenary session of the Council of the League of Nations will be held at Cologne towards the end of the exhibition. A uniform type of trilingual inscription will be adopted in every section. As regards British participation, this will be under the auspices of the Design and Industries Association, so that for once there is every chance of our country being worthily represented.

*

READY-MADE HOUSES

They are experimenting with steel-framed, standard houses in America: the kind that you choose from the catalogue—A1 for the newly-wed, C3 for the fully-developed family. By sticking to a few simple shapes, using steel framing, asbestos board walling, sheet plaster, and simple plumbing, they are hoping to reach the stage of being able to ship the whole house, complete with all electric equipment and the hundred best books, from factory direct to site. So simple is the house to be, that if perchance your family increases, you merely wire for a new room or so, which is sent by lorry and "buttoned" on. The house will thus take on all the dignity of the motor-car, and no longer will architects vie with one another, for all houses will belong to a few really popular standard types (insist on seeing the maker's name stamped on every wall). It needs but the introduction of the policy of obsolescence and it will become common enough to see last year's discarded villas lying scrapped by the roadside.

*

IN OLD BISHOPSGATE STREET

Of the thousands who crowd out of and into Liverpool Street Station during the "rush hours," as they are called, of the day, I wonder how many realize that they are treading on the sites of at least two once notable London landmarks. The more famous of these was the original Bedlam or Bethlehem Hospital, which was originally founded in 1246, as a priory of the Order of St. Mary of Bethlehem, but about a century and a half later was taken over by the Crown for use as an asylum for the insane, to which purpose it was first put in the year 1403. Thus, too, it remained till 1675, when the immense structure designed by Robert Hooke, in Finsbury Pavement, was erected.

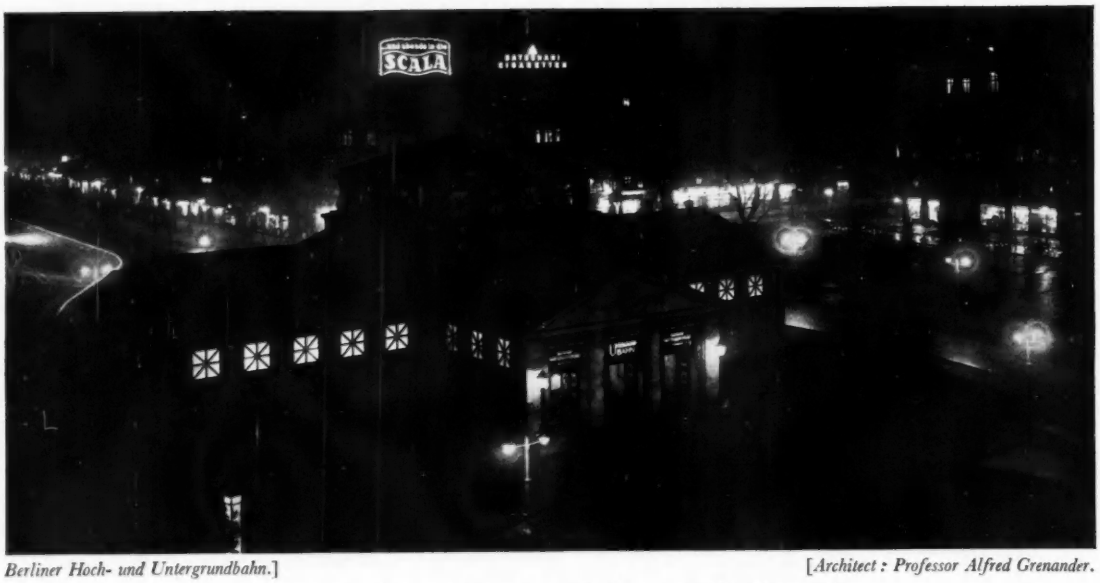
*

The other landmark, on part of the site of the terminus buildings, in Bishopsgate Street, was the former house of Sir Paul Pindar, of which I give here a little picture, showing it *in situ*. Its picturesque old frontage was happily preserved when the building was pulled down in 1871, and may now be seen in the Victoria and Albert Museum. In the reign of James I, when people of importance still lived in these eastern parts of the City, Sir Paul's residence was used as the Venetian Embassy. The photograph is, apart from this, interesting, as it shows the contiguous buildings in the thoroughfare, the appearance of which the coming of the railway station entirely altered.

ASTRAGAL



A photograph of Sir Paul Pindar's house in Bishopsgate Street, as it appeared before the building of Liverpool Street Station terminus buildings; the front is preserved in the Victoria and Albert Museum.



Berliner Hoch- und Untergrundbahn.] *[Architect: Professor Alfred Grenander.*

Figure one. The Wittenbergplatz Station: a night photograph.

ORDER ON THE UNDERGROUND

Recent Work on the Berlin "Untergrundbahn"

BY P. MORTON SHAND

UNDERGROUND railways—or "tubes," as Cockneys call them in unconscious tribute to the inventor of that voracious mechanical maggot, the Greathead Shield, which has honeycombed so much of the very "blue" cheese known as "London clay"—already exist in London, Paris, Berlin, Hamburg, Madrid, Barcelona, Naples, Budapest, Tokio, Sydney, New York, Chicago, Boston, Philadelphia, and Buenos Aires; and are under construction in, or have been proposed for, Glasgow, Manchester, Genoa, Milan, Rome, Vienna, Constantinople, Stockholm, Moscow, Osaka, and Rio de Janeiro. Inevitably, therefore, subterranean urban transport is evolving an architecture of its own which differs radically from that associated with ordinary railways, whether electric or steam.

Most of Berlin's seventy very up-to-date "Untergrund" stations are consistent with the implication of this designation. That is to say they are, like the already obsolescent Paris "Métro," situated entirely (if only just) below the surface of the street, whence they are reached by short flights of steps. There are, however, several overhead stations on the elevated sections of the five lines which, with their branches, at present constitute the 60 km. system of the *Berliner Hoch- und Untergrundbahn.* The majority of the subterranean stations have island platforms with stairways to the street, which are commanded by small booking-offices and ticket-barriers, placed at either end of them. The subway entrances to these, used impartially for ingress and egress, are enclosed in iron balustrades of an effective but sober design, surmounted by conspicuous arched portals.

Standard signs, illuminated at night as in London, frame large white letter "U's" (for "Untergrundbahnhof") on blue glass backgrounds. Busy stations have a couple of these staircases on either pavement; at less important ones they are usually situated

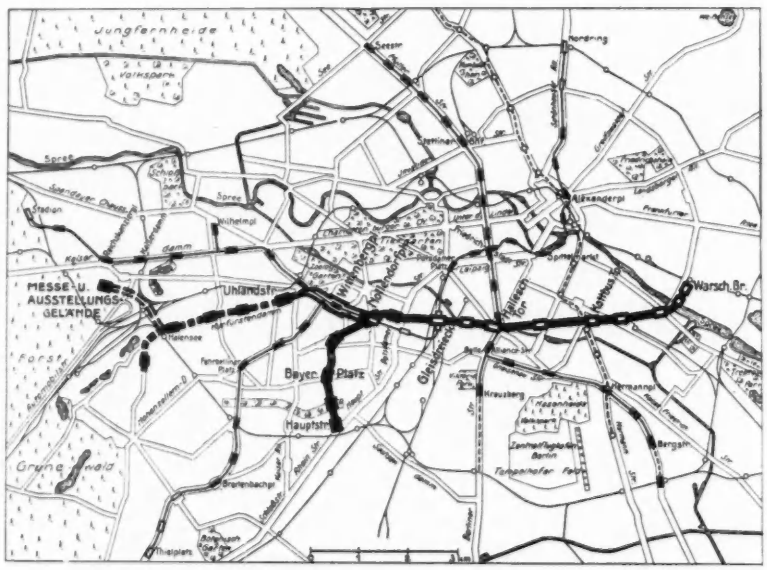


Figure two. A block-plan of Berlin's underground railways, illustrating the new east-west connections, two of the principal stations upon which are here discussed.

on central street refuges. Each station has a distinctive and uniform colour-scheme: i.e. canary yellow for Nollendorfplatz. The ceramic tiling employed for this purpose is of a rather rough-surfaced and particularly effective kind which reflects the platform lighting in a very soft and restful manner (*vide* figure ten). There is an almost total, and very welcome, absence of enamel plates. The names of the stations occur at regular intervals along the side walls in oval panels of glazed earthenware, the letters being moulded in relief, black on white. Advertisement posters are confined to a relatively small part of the available wall space prepared for their display. Newspaper, tobacco, and sweet stalls are neatly designed steel-framed pavilions.

The general impression is one of orderliness, spaciousness and fitness for function, expressed in a severely economical use of the best, most rational and most durable materials. These stations, in which German thoroughness and Swedish refinement are so happily combined, reflect the greatest possible credit on their distinguished architect, Professor Alfred Grenander, a Swede long domiciled in Germany, whose genius for co-ordination and informed taste are discernible in even the smallest details.

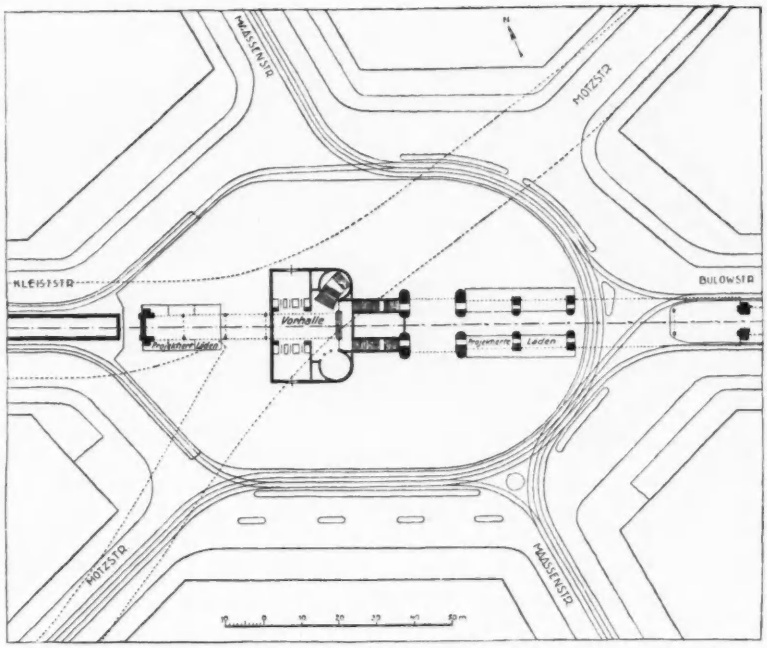


Figure three. Plan of the surface tram-lines and of the underground station at the Nollendorfplatz, Berlin, of which photographs are reproduced overleaf.

A few of the more important interchange stations have

(*Continued on page 307.*)

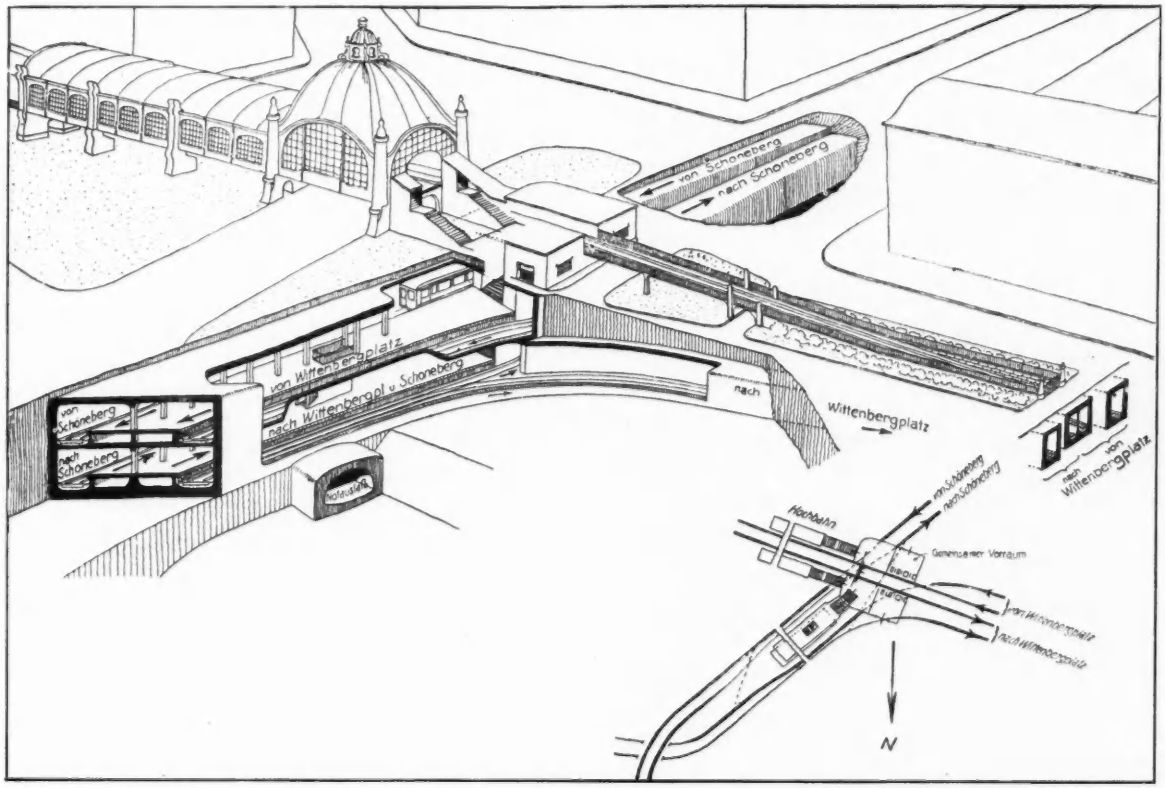


Figure four. Isometric sectioned sketch to illustrate the layout of the crossing underground lines at Nollendorfplatz station, and the nature of the problem of providing interchange facilities.

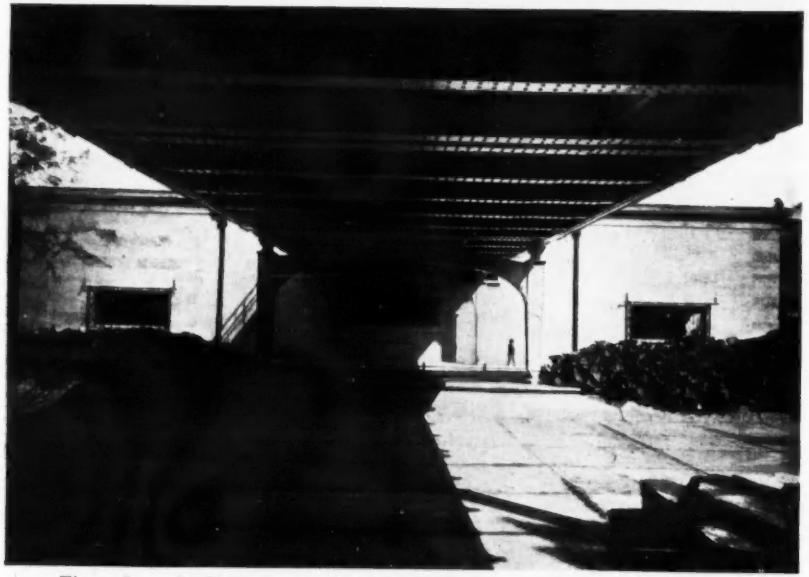


Figure five. Looking towards the booking hall from below the elevated lines.



Figure six. The entrance hall, with war memorial gates (see facing page).

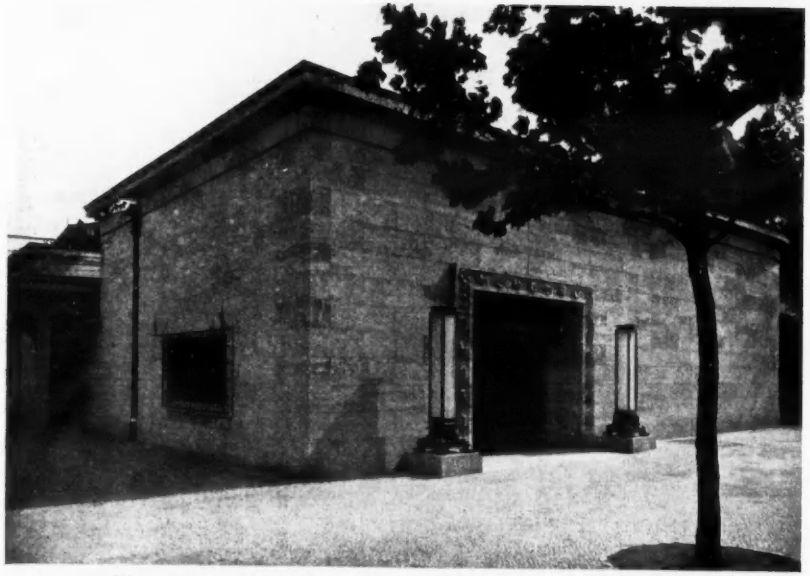


Figure seven. General view of the main entrance, taken by day.



Figure eight. Night view of the main entrance and booking hall.

Figure seven. General view of the main entrance, taken by day.



Figure eight. Night view of the main entrance and booking hall.

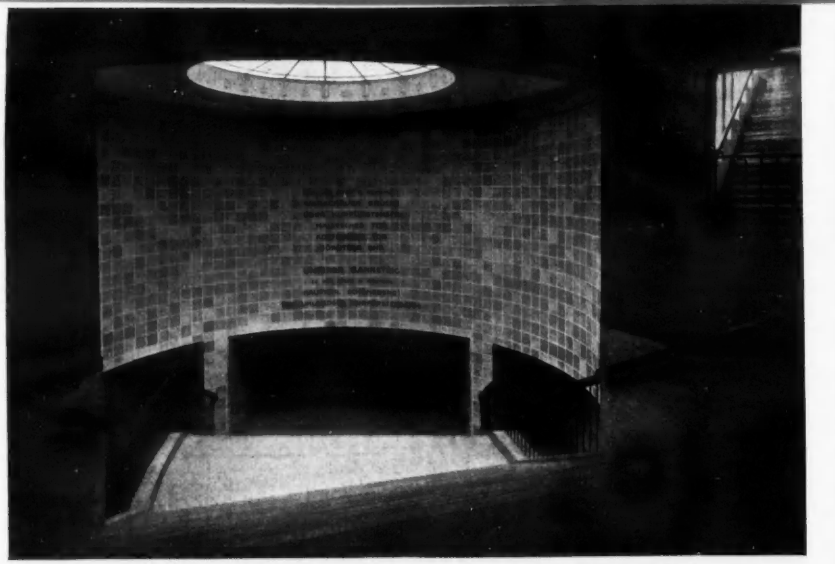


Figure nine. Steps leading from the booking hall to the four lower platforms.



Figure ten. Steps leading from the upper to the lower underground platforms.



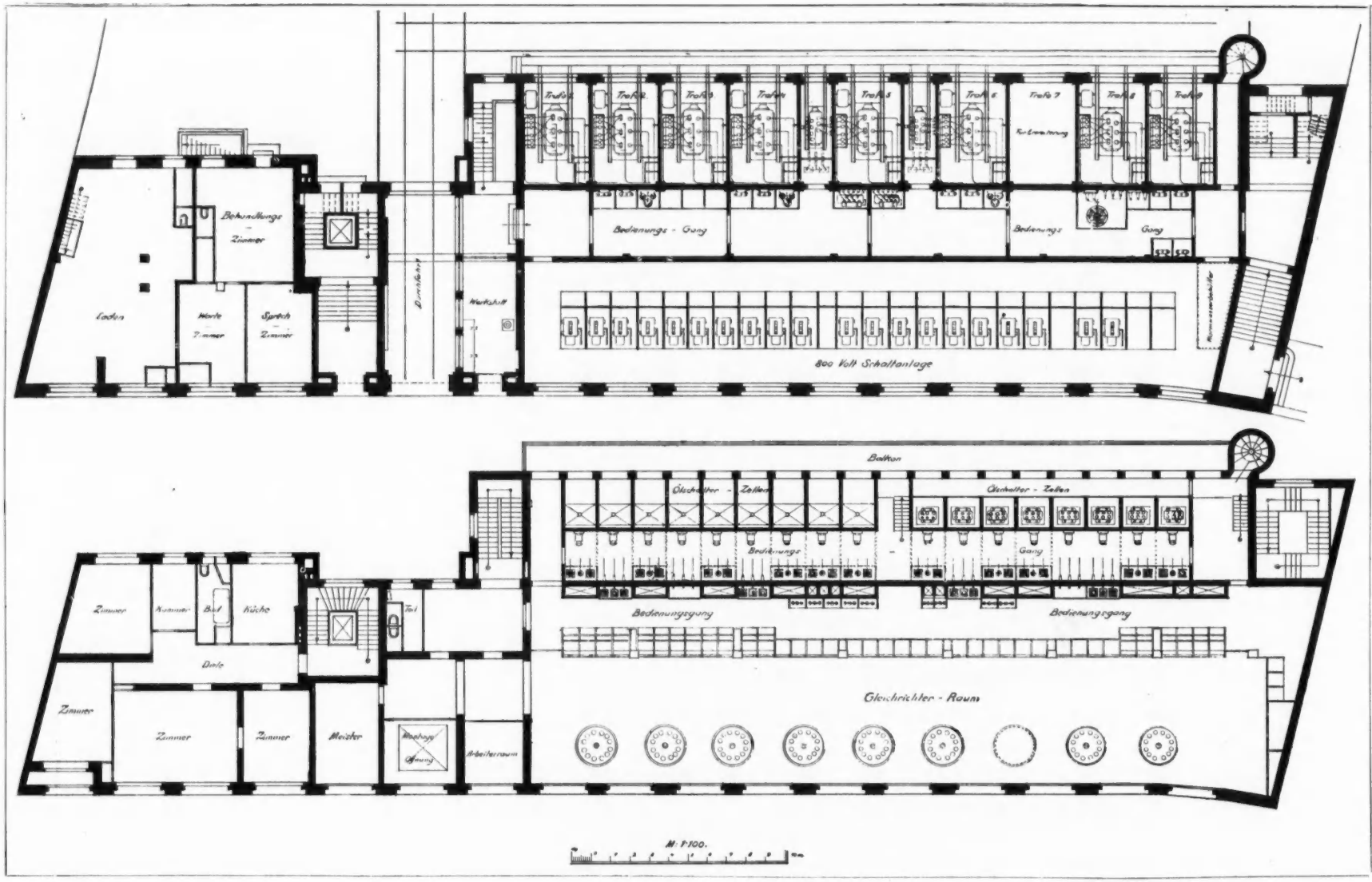
Nollendorfplatz Station, Berliner Hoch- und Untergrundbahn.]

Figure eleven. The lower (deep-level) platforms, seen from the track.



[Architect: Professor Alfred Grenander.

Figure twelve. War memorial to members of the railway staff.



Berliner Hoch- und Untergrundbahn.] *[Architect: Professor Alfred Grenander.*

Figure thirteen. Transformer station, Hermannstrasse, Neukölln: plans of ground and first floors. As will be seen, the ground floor provides nine transformer chambers, of which one is left for future extension, separated by a service gangway from the 800-volt switchboard, while, to the left, are shown offices, etc. On the first floor are housed the oil-switch cells and equalizing room, with sleeping rooms, kitchen, and other accommodation above the offices. The floors above are occupied as dwellings by the company's servants.



Berliner Hoch- und Untergrundbahn.] [*Architect: Professor Alfred Grenander.*

Figure fourteen. A back view of the Hermannstrasse substation, Neukölln, showing the dwellings occupying the floors above the ground and first, which house the electrical equipment.

surface structures. Examples of these are to be found at Wittenbergplatz (a night view of which is reproduced in figure one), and the still busier traffic centre of Nollendorfplatz, to which all but four of the remaining photographs are devoted, on the new east-west connecting line (see figure two). Owing to the recent doubling to four tracks of the line between these congested West-End junctions, both stations have had to be entirely reconstructed.

Wittenbergplatz has now four underground platforms, all at one level; while Nollendorfplatz has two elevated and four underground ones in three successive tiers. Figures three and four are given expressly to show the relation of entrance-hall to platforms, and the complications to be allowed for owing to the crossing-over of different lines, respectively. The large booking-hall at the latter station (figures five and six), into which debouch staircases from the elevated platforms, occupies the whole space lying between the two dignified and finely-detailed street entrances (figures seven and eight). In the left-hand corner of this hall is a circular well like a caisson shaft (figure nine), which contains the stairway communicating with the upper two of the four underground platforms (figure ten). Thence a further short flight of steps descends to the two low-level platforms. These lower platforms have a most striking and efficient form of indirect lighting laid in ordinary gutter troughing (figure eleven). In the right-hand corner of the booking-hall—that is to say, at street level—is a circular chamber, faced with slabs of green veined marble and floored with travertine, corresponding to the staircase well on the left, and, like it, crowned with a cupolaed skylight (figure twelve.) This is the memorial shrine to the company's employees, who fell in the war, and whose names are inscribed on eighteen mural tablets of bronze. The shrine is screened by triple iron gates of the simplest

one is left for future extension, separated by a service gangway from the 800-volt switchboard, while, to the left, are shown offices, etc. On the first floor are housed the oil-switch cells and equalizing room, with sleeping rooms, kitchen, and other accommodation above the offices. The floors above are occupied as dwellings by the company's servants.

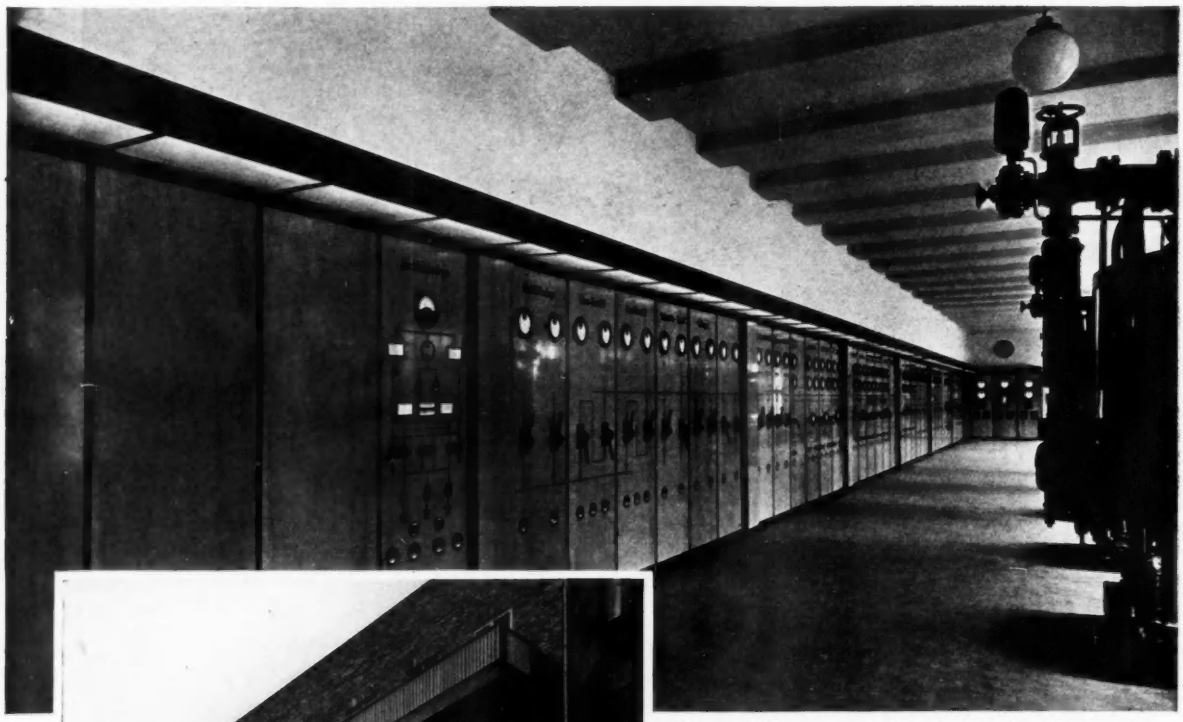


Figure fifteen. A view inside the Hermannstrasse substation, showing the switchboard panels.

possible design, the middle wings of which are kept thrown open. Immediately behind them is a bronze eagle, poised for flight, on a green marble column. There are many more elaborate and imposing war memorials; there are few more austerely beautiful or appropriately placed. The exteriors of both Wittenbergplatz and Nollendorfplatz stations are faced with a cream-coloured limestone from Franconia, called Kirchheimer, that somewhat resembles tufa.

The same compact and masterly composition



Figure sixteen. The façade of the Pankstrasse substation.



Figure seventeen. Roofed reinforced concrete bridge over Dennewitzstrasse on an elevated section.

[Berliner Hoch- und Untergrundbahn. Architect: Professor Alfred Grenander.]

is to be found in Professor Grenander's designs for some recent "U-Bahn" substations, of which the most important is at Neukölln (for plans see figure thirteen). This brick and concrete building presents a carefully fenestrated frontage to the Hermannstrasse, and is no less neatly and satisfactorily planned in rear (figure fourteen). The admirably lighted switchboard panels in the transformer-room (figure fifteen)—over the roof of which three extra stories of dwellings have been constructed for the company's officials—are a sheer joy to the eye, and show how much an architect who does not disdain purely mechanical details like circuit-interrupters and bus-bars can accomplish in the way of tidying up the ungainly paraphernalia of the electrical engineer.

The façade presented to the street by the considerably smaller Pankstrasse substation (figure sixteen) is equally competent and has an even more pleasantly urban quality. The reinforced concrete bridge spanning the Dennewitzstrasse (figure seventeen), which is roofed in so as to reduce noise and vibration from passing trains to a minimum, is another example of ordinary "engineer's work" handled in a sanely architectural spirit.

The writer's warmest acknowledgments are due both to Professor Alfred Grenander, the chief architect of the "B.V.G." (*Berliner Verkehrs-Gesellschaft*), the central traffic authority which operates Berlin's unified underground, tram and motor-bus services, and to Baurat J. Bousset, its chief engineer, for their courtesy in supplying the materials on which this article is based.

THE ABBEY SACRISTY: ARCHITECTS CON THE DEAN'S PROPOSALS

We publish hereunder a selection of letters setting forth views of prominent architects as to the Dean's proposals for building a sacristy as an annexe to Westminster Abbey, elicited by the article on the subject printed in the last issue of THE ARCHITECTS' JOURNAL.

EXTEND THE ANCIENT BUILDINGS SCHEDULE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I have read with great interest and approval your excellent leading article on the proposed sacristy at Westminster Abbey in the current issue of THE ARCHITECTS' JOURNAL.

The long controversy concerning the Dean's deplorable proposal emphasizes very forcibly the inconsistency of the present law—or lack of it—which allows our principal national monument to be controlled by an individual, whilst the incumbent of the humblest country church must needs submit—and rightly so—any such scheme to his Diocesan Advisory Committee, and obtain the necessary faculty. The law of scheduling ancient buildings does not at present go far enough, and it is high time for its extension to include the most important public buildings as well as mere ruins and uninhabited buildings.

The present unencumbered north side of the Abbey was only obtained at great expense, and it is inconceivable that public opinion—so lightly called "irresponsible" by the Dean—would countenance a first step in a new cluttering of the chevet.

If you were to publish, side by side, views looking towards the site in a south-easterly direction with and without the excrescence, you would probably obtain an overwhelming majority of opinions from your readers opposing the proposal. No architect could possibly prefer the "with" view.

Your illustration of the north transept, looking west, does not adequately make clear to those who were unable to see the model how completely it obscures the beauty of Henry VII's Chapel.

The Dean's defence is partly built upon the faulty foundation of two limited questions which could and did only produce a muzzled answer from the Royal Fine Arts Commission. That particular form of "great tactical skill"—as you politely describe it—is now likely to prove more helpful than otherwise to those opposed to the contemplated addition.

BASIL OLIVER

BUILD ON THE OLD SACRISTY SITE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—With regard to your interesting leader and comments on the long-drawn-out Westminster sacristy controversy, as a matter of psychological interest I have had all the correspondence starting from January last collected.

Up till a month ago, the Dean, with consummate skill, seemed to be wearing down his critics. Then came a new society with fresh and more insistent energy; and the Dean showed signs of wavering against this new onslaught. There was no ring of conviction even in his "I cannot take the opposition seriously."

There are points in your leader I do not agree with. It is not the duty of an architect to carry out the instructions of his client in matters of design; he is not an employee in the sense that a contractor is. If the Press had led educated public opinion earlier (even *The Times* seemed on the Dean's side for a long time) no new society need have been created to voice such opinion. Is it clear that a sacristy is needed? Has religious fervour increased so remarkably since the days of Dean Stanley? If the services of the Abbey cannot be conducted without an addition, the Society of Antiquaries has advised the only possible way—the building on the foundations of the old sacristy, the plan for which was presented in April. This proposal would give the accommodation without being seen architecturally at all. Mr. Tapper should consult his great predecessor in his office—the nation would be content with his decision.

P. MORLEY HORDER

BUILD UNDERGROUND

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The Dean and Chapter require a sacristy. Let us accept that and face the problem of how to provide it without tampering with a national possession—a thing no man has a right to do.

We are of an age when building presents no insuperable difficulty, and I see no reason why the sacristy should not be so placed underground as to provide safe storage for the Abbey possessions and to give convenient access to those whose purpose it is to serve. Thus we shall, first and foremost, retain our treasured possession, and then give to the Dean and Chapter the essential of their requirements.

LESLIE MANSFIELD

To the Editor of THE ARCHITEGTS' JOURNAL

SIR,—Surely the proper course is to construct a wardrobe and dressing-room (which is all that a sacristy is) under the turf of the site upon which it is contemplated to erect an imitation of fifteenth-century work. An underground room can be dry, light, airy, and in every respect so suitable to its purpose as to be unsurpassed by any sacristy. Why, then, outrage public sentiment?

NATHANIEL LLOYD

BUILD IN THE NATURAL MANNER OF TODAY

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I disagree with you so thoroughly about the Abbey sacristy that I feel drawn into the controversy.

As an architect, I consider that such designs as that of the north side of the Abbey gain more than they lose by low accretions; as a practical man, I consider that the sacristy ought to be put where the clergy will find it most convenient; as an Englishman, I consider that the present century ought to welcome any reasonable opportunity of contributing, visibly and characteristically, toward the completion of a building to which each of six preceding centuries has visibly and characteristically contributed.

You, on the other hand, think that the north side of the Abbey should be unencumbered, that the convenience of the clergy should be considered only within the limits of popular approval, and that the development of the building should now be—I presume, finally—arrested. There seems to be no meeting ground between such contrary opinions; and more people agree with you than with me, if the enemies of the Dean's proposals are as numerous as they are insistent. Accepting our difference, however, I see some possible points of accord.

I think, for example, that we should both like to be assured that wherever the sacristy be put, its architect has been allowed to build it—in the words of the general recommendations of the S.P.A.B.—" in the natural manner of today, subordinate to the old, and not a reproduction of any past style."

I think, also, that we should like to know the grounds of the Dean's view that St. Faith's Chapel is irreplaceable for private prayer. The regrettable habit in this country of praying in corners and giving the rest of a cathedral over to other uses is too deeply rooted to be disregarded—but surely if St. Faith's Chapel be made a thoroughfare there are corners left for those whose devotions are troubled by passers-by? If the Dean has no other objection than the disturbance of this chapel to the site proposed by the S.P.A.B. for the sacristy I hope that, in the interests of peace, this site may be chosen.

H. S. GOODHART-RENDEL

TRUST MR. TAPPER

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—It is difficult to give an opinion on a matter of this kind without knowledge of the details of the case. But from an artistic and architectural point of view I consider that the proposal is quite safe in Mr. Walter Tapper's hands, and he can be safely trusted to carry out what is required in a perfectly satisfactory manner to suit his clients and not to harm the Abbey in any way.

WALTER CAVE

NECESSARY ADDITIONS SHOULD NOT BE PROHIBITED

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I was serving on the Councils both of the Society of Antiquaries and the London Society when the matter of the sacristy was discussed, and I associate myself wholly with the pronouncement of these bodies, which endorsed the suggestion I myself made in a letter published in *The Times*. I should like to say that in neither case was the view held that modern additions to ancient buildings should be prohibited where they were absolutely needed. The Dean's scheme was objected to, not only because it obscured the most valuable part of the Abbey and crowded St. Margaret's Church, but because it clearly precluded the architect from adding anything worthy of the Abbey itself.

WALTER H. GODFREY

PRESERVE OBJECTS OF BEAUTY OR TRADITION

To the Editor of THE ARCHITECTS' JOURNAL

(Telegram from South of France)

I am decidedly opposed to modification or change to national monuments by those who may be for the time being in charge of them unless such action is endorsed by the nationally recognized authorities on such matters. Stop. With such authorities existing how dare we allow less informed persons to decide such matters if we are determined to maintain the world-famed national historical objects of beauty or tradition for the enduring benefits of future generations.

ALFRED C. BOSSOM

TAKE AMPLE TIME TO INVESTIGATE ALL PROPOSALS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I do not feel able to give authoritative views on the controversy which has arisen about the sacristy at Westminster Abbey, not being sufficiently conversant with the details of the proposals. I am, however, fully in agreement with those who hold that the Abbey is a national possession far too precious for its fabric to be altered merely to suit the convenience of the Dean and Chapter, however well-intentioned their endeavours may be, without the fullest investigation and ample time for the consideration of the various points of view put forward by equally well-intentioned critics of the proposals.

T. ALWYN LLOYD



ENGLISH PRECEDENT No. 79

BALCONY, ATHENÆUM CLUB, LONDON

Judged from the modern standpoint, the older London clubs are small. As examples of architectural good taste they will never be excelled.

Decimus Burton and Sir Charles Barry wisely continued the type of clubhouse evolved in the later years of the eighteenth century.

We admire the details of the Athenæum Club, not alone for their selection, but for the restraint shown in assembling the parts.—[A. E. RICHARDSON.]



The garden front of Imber Court House after the "tidy-up."

IMBER COURT HOUSE, WILTSHIRE

TWO OF MR. BASIL OLIVER'S JOBS

CROACH'S, IDE HILL, SEVENOAKS

BY H. B. CRESWELL

When an architect shows a drawing or photograph of one of his works to a friend, he speaks of the building as "one of my jobs"—much as a writer refers to his best-studied lucubrations as "some of my stuff"—and as this JOURNAL addresses itself more particularly to the initiated in various fields of building than to the layman, I make no apology for introducing these examples of Mr. Basil Oliver's work in the same words in which he would introduce them to me. In point of fact, however, he does not claim Imber Court House as one of his jobs; he calls it "a tidy-up." I thank thee, Oliver, for teaching me that word; for whatever opportunity the house may have offered for its restorer to indulge his invention, the merit of the renovation lies in the architect having denied himself that opportunity. Imber Court House was gutted by fire a dozen years ago, and the photographs show how Mr. Oliver tidied it up.

I do not know whether many persons share my delight in the personality of houses, and, in less degree, in that of villages and small towns; but as my experience of life, fortified by Francis Galton's memorable *Enquiry into Human Faculties*, persuades me that we are all brothers under our skins, and that our most intimate mental experiences and reactions are the heritage of all, I feel I shall be on common ground in appraising this house for qualities which belong neither to tradition nor to architecture. In point of fact, a close scrutiny is needed before such technical interests are discernible; but the house has personality, and, as with every house, that personality is coloured by its setting.

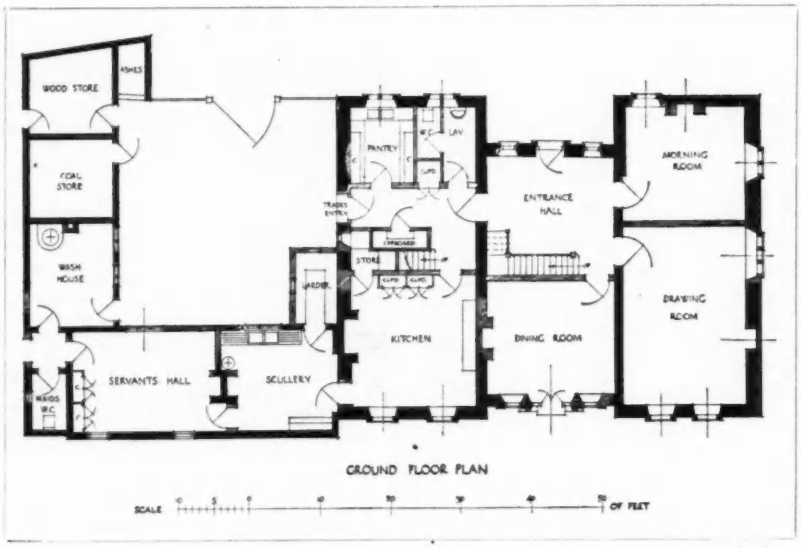
The village of Imber is as near to being no place at all, with a situation nowhere, as any in England; it also



Imber Court House before the fire. "Architecture's last gasp."

belongs to the past and, alas, has no future! Not only is there no cinema at Imber, but the motor that stands in the road and pumps the picture through a wire into a barn, is never seen there. The hamlet consists, in addition to the Court House, of a few cottages and a farm, all of chalk cob and thatched with straw. The fence walls, also, are of cob; and also are thatched with a widely-projecting coping, supported on sticks thrust into the cob, in the manner characteristic of central Wiltshire.

These few scattered buildings of mud and sticks and straw lie tucked away among trees in a fold in the bald undulations of the down-land in the middle of Salisbury Plain, seven miles east of Warminster, in much the same way as leafy villages lie hidden amid the bleak contours of the Cotswolds and Exmoor. There are no main roads near to Imber; the map shows nothing but tracks and by-ways, and no place-names appear but those that identify sheep-downs and, in Gothic letters, "British Village," where pre-Roman hutments once stood. It is just one such spot as those described by W. H. Hudson, where the shepherds of his boyhood lived and died without ever travelling twenty miles afield; and where he knew men who in early life



[*Basil Oliver.*

Imber Court House : the " tidy-up " of the ground floor. The walls left after the fire are shown in black ; the new work, hatched.

had run down on foot, with dog and crook, and killed, deer ; and shouldered the booty home secretly at night.

Now, upon these wide downs, the music of the flock is displaced by the music of the open exhaust, and the shepherd by the officer in command of Tanks. Where the sheep ran there now run, at 40 miles an hour, the units of a mechanized cavalry, each weighing 25 tons and capable of charging cylinders of solid concrete 6 ft. in diameter rooted into the ground. The Tank approaches; the concrete is shattered and leaps aside; the Tank passes on. If Tanks do not actually wipe out Imber, Court House and all, with one compact charge, as they readily might do, it is likely that by other official processes Tanks will still efface Imber and leave but the name behind.

This, then, is the setting which colours the personality—as I have named it—of Imber Court House. We see a house which, before it was burnt, and whether it was known to be haunted or not, was clearly the abiding place of at least one ghost, and which was only redeemed by the well-mannered cheerfulness of its central garden entrance from obviously harbouring a murderer. Mr. Basil Oliver has, in his tidying-up devices, been successful in entirely wiping out these grim implications ; and when we now visit the hamlet we are welcomed where we were previously repulsed, and inspirited where we were depressed.

The house may once have been a manor, and later, if we may judge from the ceremonial garden front, a private country house, before it decayed to homestead and farm. In 1916 the War Office " took it over," with more than usual thoroughness, by burning it. It had apparently been remodelled or in part rebuilt two or three times in its history; certain old walls are of rubble, but the entrance front is of brick with stone quoins, and its date is fixed at about 1700 by the stone doorway seen in the photograph (see frontispiece of this issue). This is the one distinguished architectural detail the house offers. The clean, fine lines of the head, and the boldly-moulded architrave surround, are characteristic of the best of their kind and epoch. It is strange to find in this remote, humble house a feature so closely identified with the fashionable elegancies of new town frontages of its time.

The window and door surrounds of the garden front show how the same sort of thing as the entrance door was done in the middle of the nineteenth century; after 150 years we had learnt to do a good thing with great confidence and badly, for the two examples represent customary building at their respective dates and may justly be compared. Of their terrible kind, however, these windows and doors are not so bad as might be expected; they have vestiges of style, and my feeling about them is that in this kind of work and at that date (*circa* 1840) there expired the last vestiges of tradition. In Imber garden front we have building; after Imber garden front we find only the work of architects or limbo. This front is Traditional Architecture's last gasp.

An examination of Mr. Oliver's tidying-up shows the roof raised to give a second floor over the whole plan; the building of gables which are half hipped, out of respect for horizontal values; the fenestration of the blind panels on each side of the garden entrance; and the maintenance of a fixed unit for window squares governing the relative proportions of the openings—a principle with which all architects are familiar.

It will be noticed that the width



[*Basil Oliver*

Imber Court House, tidied up and awaiting the Tanks. "The village is as near to being no place at all as any in England."

the walling between the windows differs in each gable, and that in both the arrangement is out of centre. This is clear enough when observed, but is not readily noticed, and there is no doubt that the elevation gains effect from this softening of a rigid symmetry.

This enforces the view that the front represents traditional building, for no architect could deliberately so design a front or allow it to design itself; and this is, I think, one instance among many of the way the architecturally trained mind is divorced from sympathy with those past principles of building which so much awaken our admiration. On this point of deviation from symmetry as a principle of design I would, however, remark that in many of those house-designs of Georgian affinity for which Ernest Newton is remembered, he did intentionally and with aforethought place a central feature out of its central position. By that device he succeeded perfectly in softening the aggressiveness of the symmetry without disturbing the effect of a balanced frontage.

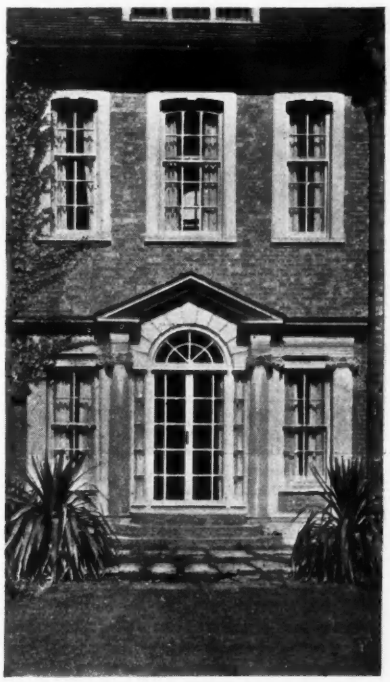
Of the plan it is only fair to say that "a tidy-up" not only describes but explains it. The main walls, shown in black, survived the fire; the architect's business was to contain the rooms within them, and there were no individual tastes of an owner to consider, as the house was renovated only for the purpose of letting. Everyman's house is no man's house, for that which is made to meet the common necessities of all will exactly fit the needs of none. The plan gives no hint of the personality or tastes or activities of the owner as every right plan should, for there is no owner. It is a house built for nobody, and as nobody would be likely to find anything unreasonable or fanciful about it, it fits the case well. It has eleven bedrooms, two bathrooms, and two staircases.

CROACH'S, IDE HILL.

The house at Ide Hill, Sevenoaks, speaks for itself; it is a small, modern country house compactly planned and well found. It is built of the multi-coloured brindled and yellow bricks such as are known as London stocks, but with a mingled tinge of red and without the distressing impurity of some London stocks, whose origin in complicity with the domestic dustbin is made too obvious by cinders and fused trouser buttons to be forgotten. The chimneystacks are of a specially made, 2-in., multicoloured, red stock, laid with wide joints; and the roof is covered with dark red, sand-faced, hand-made tiles. The house stands on the slopes of Ide Hill, adjoining the Edenbridge road, and below the land reserved by the National Trust which has been a place of pilgrimage for many hundreds of years by reason of the wonderful prospect.

The house is known as "Croach's" because it adjoins a plantation known as "Croach's Wood." The fashion or sentiment of naming one's home has changed since the days in which Thackeray described, in his *Book of Snobs*, his visit to Major and Mrs. Ponto, of whose home he writes: "In old Squire Ponto's time the house was known as 'Little Bullock's Pound,' but Mrs. Ponto has rechristened it 'The Laurels.'" It is well, however, not to inquire into the origin of these old place-names. The answer to the question "Who was Croach?" is likely to be that Croach committed suicide, or was murdered, or murdered some one, in the wood identified by his name. The most joyous place-name for a house I have come across is "Bloody Corner," near Bideford, but a house that stood close by preferred to call itself "Linden Lodge," or something of the sort.

The novel feature in the design of Croach's—the projecting wing walls—have other justifications than the proximity of the architect's office to a certain building on Campden Hill. The subsoil is a treacherous clay, and the stiffening of the angles of the building by carrying down the kneelers of the gables in a 14-in. projection to the ground, is an outward acknowledgment of a hidden fact. That the projection upon the north side should mask the unsightly agglomeration of soil and waste pipes is also an added grace, for the aggressiveness of these crudities upon a fashion of living in which elegancies displace realities is often painful. On the other hand, although rain-water pipes are a torment and a snare to the designer of elevations by upsetting or strengthening proportions with strong vertical lines which have, in fact, no significance whatever, I am unaware of anything indelicate or even flagrant about them, and am in consequence rudely reminded of my coarse insensitiveness when I notice the care with which Oliver has screened them.



Imber Court House: the garden entrance (circa *1840*).



[*By Basil Oliver.*

Croach's, Ide Hill, Sevenoaks. The front entrance, showing the discreet rain-water down pipes, masked by the projecting wing walls.



Croach's, Ide Hill. From the south-east.



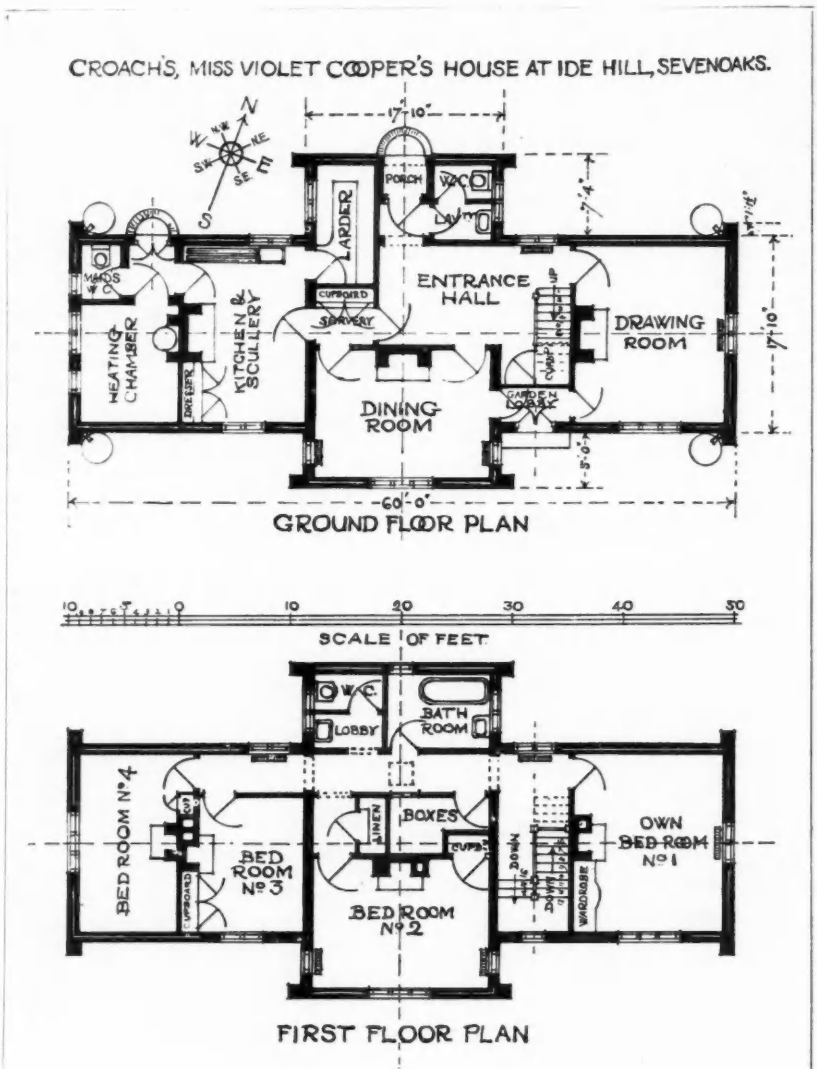
[*By Basil Oliver.*

Croach's, Ide Hill. From the south-west.

Mr. C. F. A. Voysey, in his designs of some years back, made use of sloping buttressed wings and, as he held, with the logical justification of restoring strength to attenuated walls; but his example has not been followed, and I am unaware that I have before seen the arrangement Mr. Oliver here favours. Any feature that is strikingly unusual in a house, which awakens the attachment we all have for the traditions of the countryside, is a challenge to our understanding of what is appropriate.

If, however, we allow a mere revulsion against the unexpected to influence our judgment, we countenance a critical hostility which would, in fact, have forbidden the forms we have learnt to expect from ever coming into existence. Every feature of architecture was an innovation once. For my part the only adverse criticism I have to offer to the use of these wing walls is that they are unusual, and that is not adverse criticism. If I said I thought they were unnecessary and that they were not expressive of anything that was structurally justified, I should open a question upon which there would be wide differences of opinion. Architects use many forms and devices of which the origin has been forgotten with the need which made them part of tradition, and the sole justification for the use of these forms and devices is that they are familiar, awaken associations, are understood, and are expected. They are, in fact, part of the vocabulary and syntax of composition in architecture.

Mr. Oliver has added something new to that vocabulary, and if the form had been first made use of by traditional builders, as it might well have been, it would be likely to be now embodied in the vernacular, for there is an aptness in these wing walls which, in a remarkable way, makes them acceptable in



[*By Basil Oliver.*

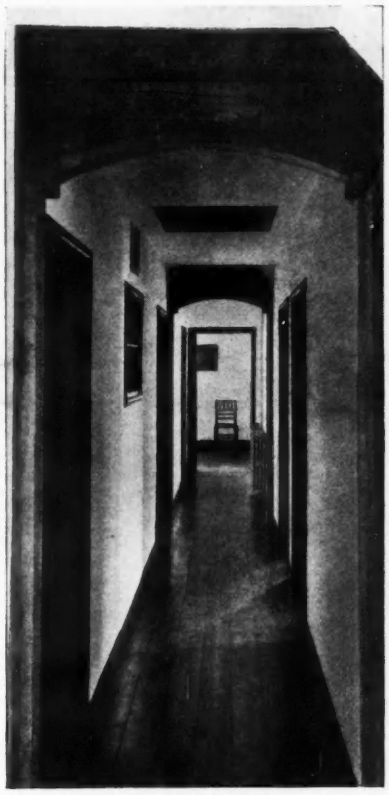


Croach's, Ide Hill. The north entrance.



[*By Basil Oliver.*

Croach's, Ide Hill. The drawing-room fireplace.



Croach's, Ide Hill. The first-floor corridor.

spite of their unusualness. It is not necessary to describe what is shown in the photographs. Iron casements with leaded lights in untreated oak frames are clearly seen. What is not so clearly seen is the tarred plinth.

ARCHITECTS' FEES: WHEN SHOULD ACCOUNTS BE RENDERED?

Mr. R. Jackson, of Madras, in the following letter, just received, opposes Karshish's view as to the best practice to adopt in sending in an account for fees. He regards the rendering of an account by the architect and its payment by the client simply as details of office routine, and outlines a business-like method, which he claims has worked satisfactorily on a fairly large scale for several years.

SIR,—I find it amusing and incomprehensible that there should be any serious dispute on this subject. To the architect with a large practice the sending out of a statement of fees due is not an event of overwhelming importance, but a matter of office routine which ordinarily he leaves to his head clerk or private secretary. Surely, therefore, it is not too much to assume that the client also will regard the payment of the account simply as a matter of routine. The young or struggling architect should try to place himself in this position.

If an architect follows Spinlove's example and commits the gaucherie of asking for payment "if convenient," he will not only run the risk of irritating his client, but will raise a doubt as to his own financial stability, by stressing a payment which is relatively small and unimportant in comparison with the other payments his client has to meet in connection with the contract.

The following method is straightforward and businesslike:

On receipt of instructions the arrangement regarding fees should be recorded in writing, even when, as is often the case, the client is a close personal friend. In the case of a new client the architect should state that he carries on his practice under the R.I.B.A. Conditions of Engagement and Scale of Professional Charges, a copy of which he should offer to send if desired. In addition, he should make a point of explaining verbally the procedure necessary in order to carry out a building contract, and this necessarily includes a brief reference to the question of the payment of fees.

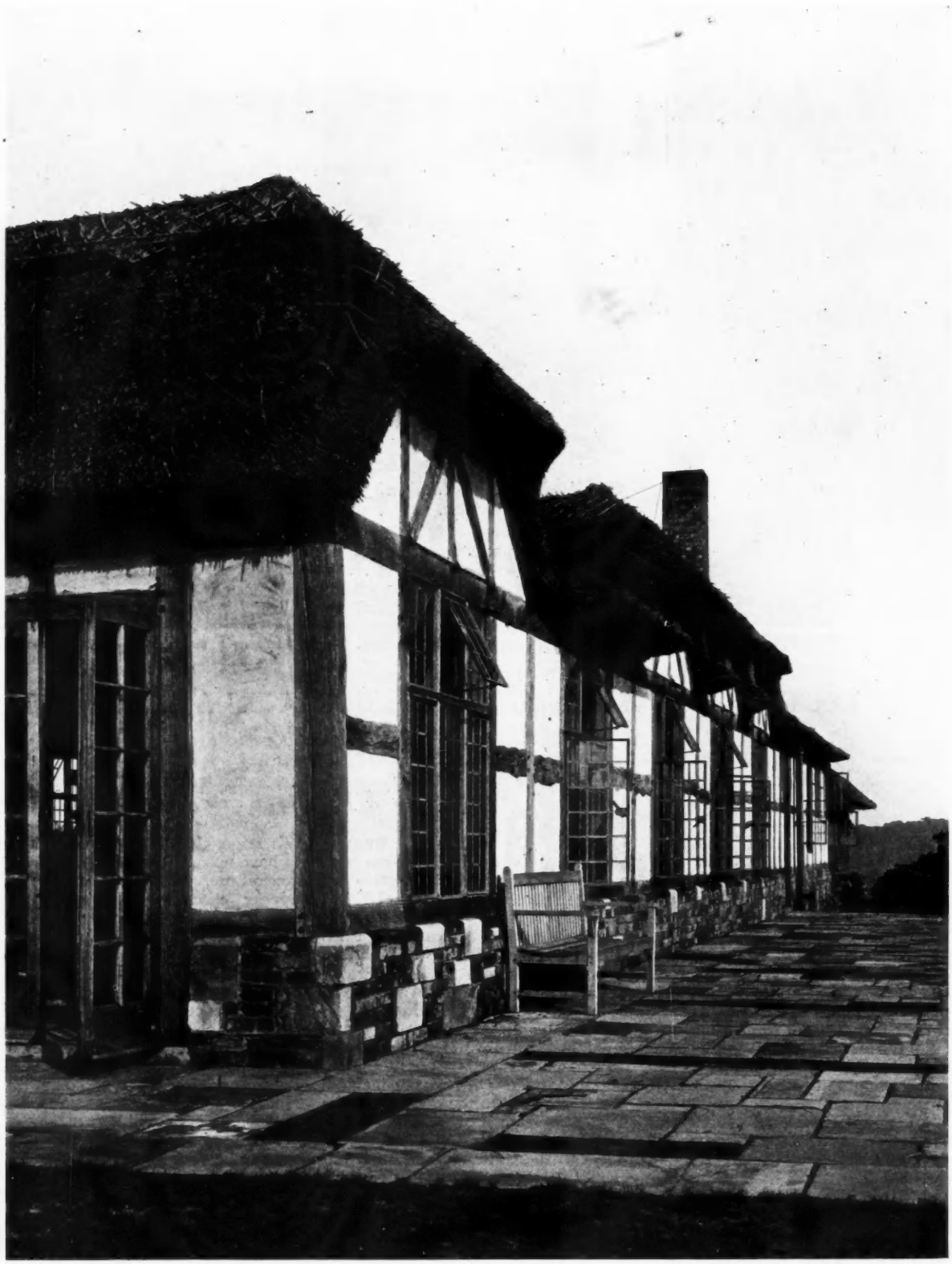
Unless there is some very special reason to the contrary, he should not send in a claim for fees until a contract has been let. Then he should send a claim for 2½ per cent. of the contract sum, plus fees for special duties performed to date in connection with survey, and other items not included in the percentage scale, and any out-of-pocket expenses incurred.

The R.I.B.A.'s scale of two-thirds at this stage, though a very useful right to have up one's sleeve, is too large for general use. Not only will it probably appear excessive to the client, in relation to the services rendered to date, but the small balance left is an unpleasantly small remuneration to receive during the heat and toil of construction.

The balance of fees should then be claimed each time a certificate is issued.

This is an obviously satisfactory and businesslike method, and I can see no satisfactory alternative, although other methods might prove more suitable under different conditions.

Nothing annoys a business man more than to be confronted with an account for professional services long after the services have been performed; and my advice to a young architect, who wishes to retain the confidence and respect of his clients, is to submit his account as his work is done, in case he has to spend the last years of his life in the mournful way Mr. Bolton attributes to Sir John Soane. R. JACKSON

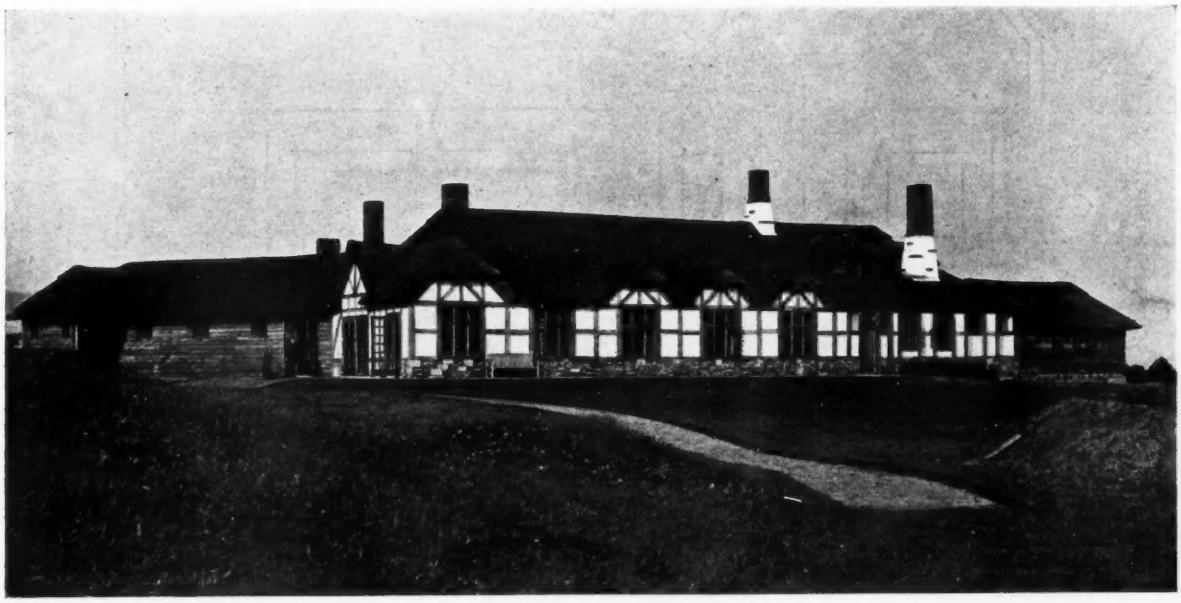


Tandridge Golf Club.] [*By Stanley Hamp (Collcutt and Hamp).*

A view of the club-house, looking along the flagged terrace, on the course side of the building. The nearest portion contains the lounge, made, with additions in strict keeping, out of an ancient structure purchased in a village near by; the remainder, which is new work, contains kitchen and service quarters.

TANDRIDGE GOLF CLUB-HOUSE, SURREY

DESIGNED BY STANLEY HAMP (COLLCUTT & HAMP)



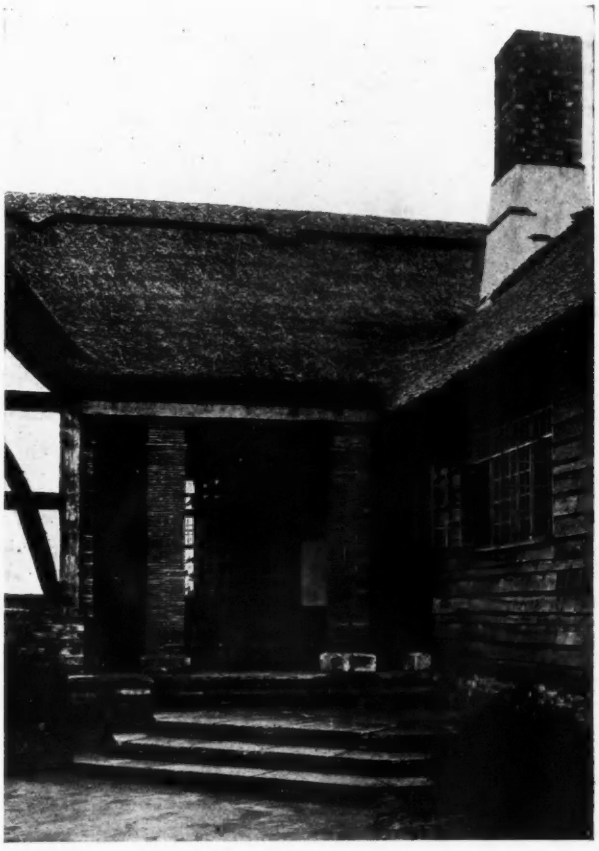
A general view from the golf course ; the old barn that forms the nucleus of the club-house extends from the near corner to the first of the two chimneys on the right.

THE club-house was built to serve the new course designed by Mr. H. S. Colt. The aim was to produce a building in harmony with the traditional work of the locality. It was found possible to purchase the tructure of an old barn from an adjoining village, and this vas re-erected in its original form as the lounge of the club, with an addition, in keeping with the old structure, on the course side, to provide space for dining-tables in recesses.

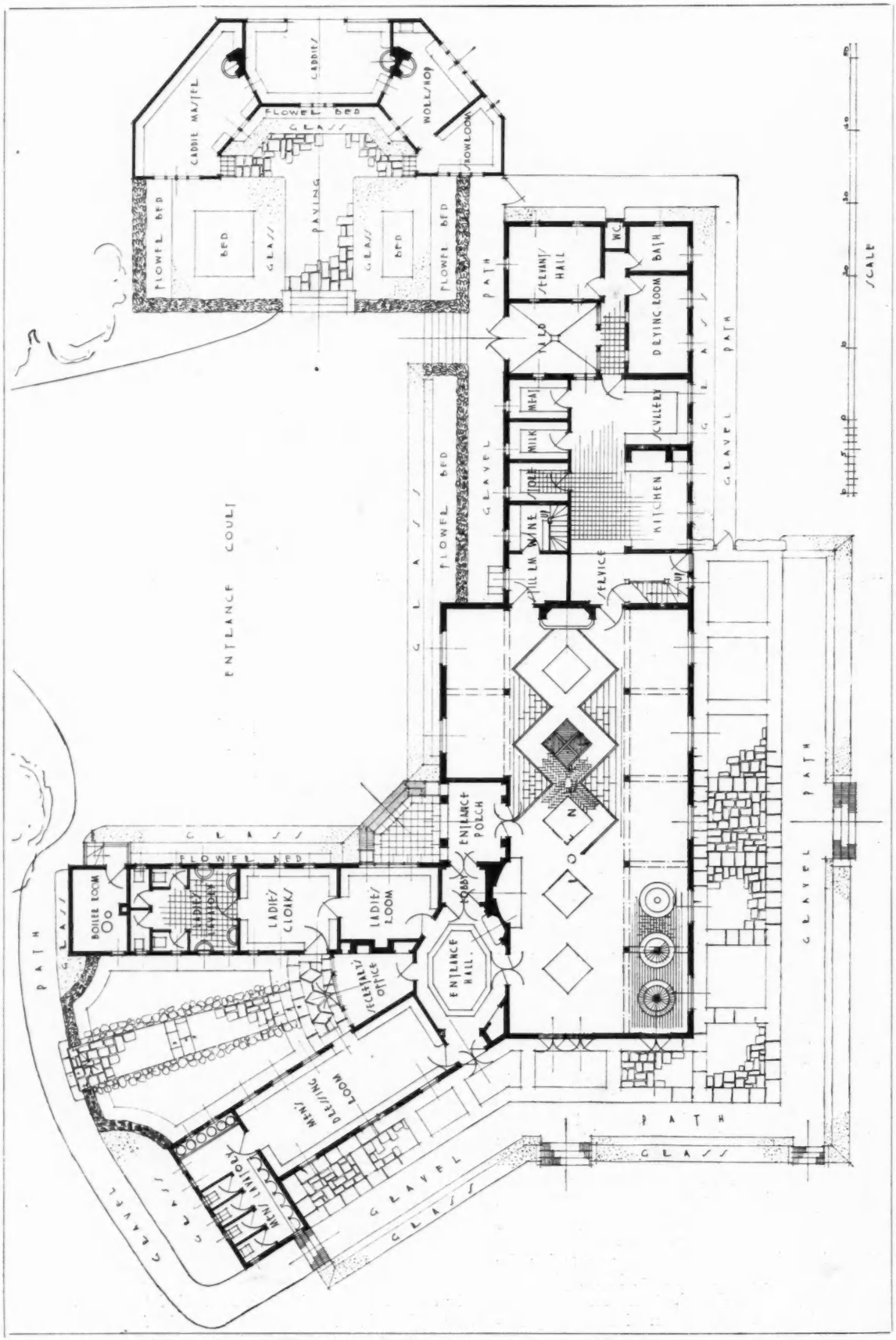
The external walls of the main building were built of oak framing, filled in with brick, finished in stucco, with a float face. The plinth was built in random brick, stone, and tiles. The wings containing the gentlemen's and ladies' locker-rooms, dressing-rooms, lavatories, etc., were timber-framed and faced with oak weather-boarding. The professional's quarters, with caddies' rooms, etc., were constructed in the same manner.

A special feature was made of the roof, which was finished externally in Norfolk reed thatch. The whole of the oak work was left exposed inside the rooms and the new oak members were left from the adze and toned down to match the former. All the furniture in the lounge was specially designed to harmonize with the character of the old barn structure. The internal woodwork to the main building, such as doors, etc., was executed in oak ; that in the new annexes was carried out in pine, toned to match the oak. The windows are hand-made metal casements with leaded lights throughout. All the internal fireplaces were carried out in brick and tile, extensive use being made of shaped hanging tiles to form moulded jambs and lintols. Heating of the building is assisted by radiators, with a separate boiler for hot-water supply.

The original intention of the architect was to lay the floor of the lounge with brick, as shown in the plan, but composition flooring was substituted. The photographs and plan drawing indicate how the ground immediately surrounding the club-house has been laid out in accordance with the architect's designs, use being made of stone flags, etc.



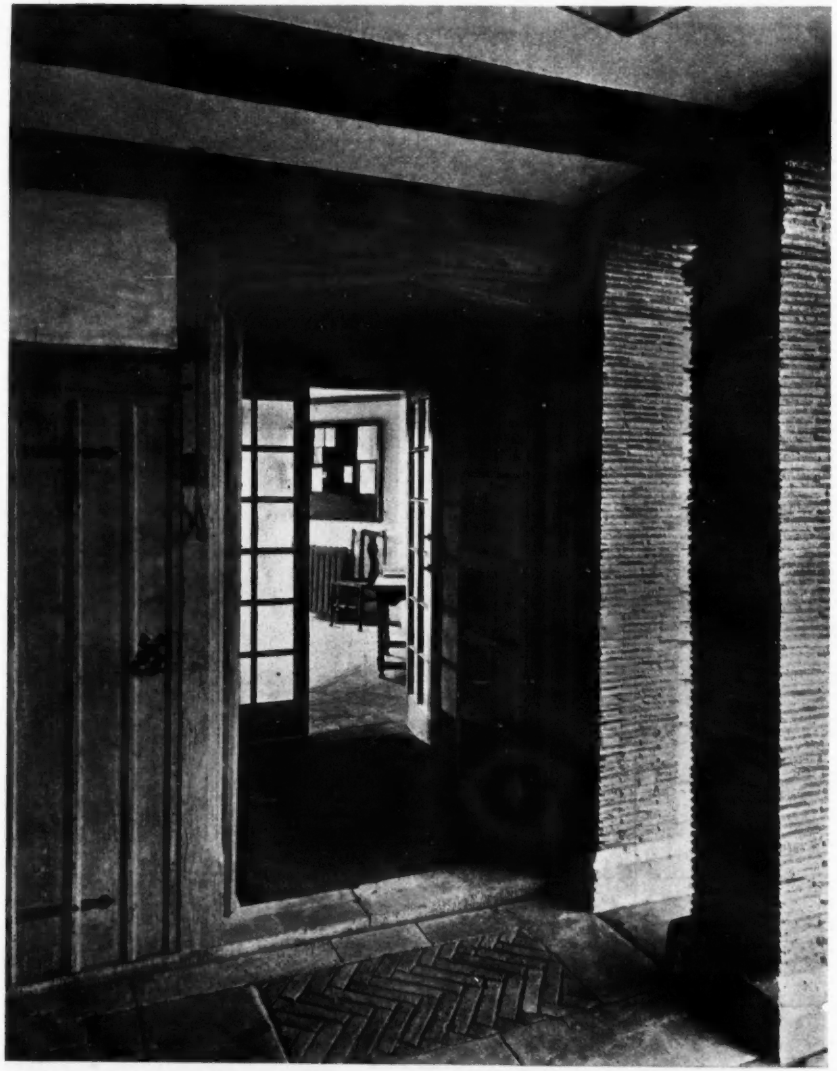
The entrance porch, which is in the angle between the re-erected barn (left) and the newly-built portion (right) in one corner of the entrance court. A photograph of the doorway details is given on page 321.



Tandridge Golf Club.] [*By Stanley Hamp (Collcutt and Hamp).*

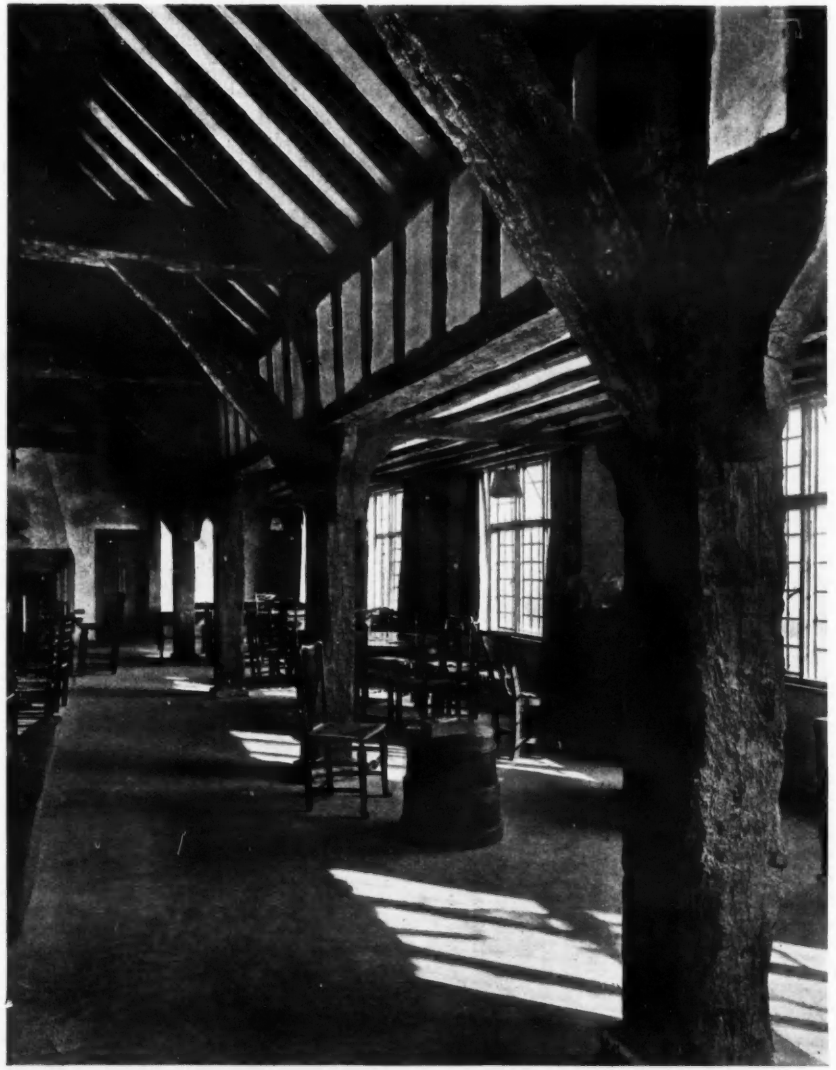
The architect's plan. The eight-sided entrance hall is the focal point for circulation between the two radiating wings, housing ladies' and men's dressing-room accommodation; the main entrance to the clubhouse; and the lounge. The lounge floor is here indicated to be laid in brick, but this proposal was abandoned.

The architect's plan. The eight-sided entrance hall is the focal point for circulation between the two radiating wings, housing ladies' and men's dressing-room accommodation ; the main entrance to the clubhouse ; and the lounge. The lounge floor is here indicated to be laid in brick, but this proposal was abandoned.



Tandridge Golf Club.]

Doorway in the entrance porch illustrated on page 319. Features of the building are the fine brick- and tile-work, and the use of oak throughout the main portion. The iron fittings are also, here, worthy of note.



[*By Stanley Hamp (Collcutt and Hamp).*

The interior of the lounge, showing the oak timbers of the original barn left exposed, and the addition, on the right, of an annexe to accommodate dining tables in recesses. The windows overlook the course.

PROFESSIONAL POLITICS:

Quantity Surveyors' Fees

BY H. J. LEANING

ANY reasonable-minded quantity surveyor who takes notice of the conditions under which he works today compared with those in other professions would not be by any means satisfied. It seems a guileless and innocent act on the part of public bodies to ask what quantity surveyors would charge for a certain piece of work, but, unfortunately, owing to lack of agreement or professional discipline, this practice leads to competition between the surveyors, which does not make for dignity nor for the maintenance of a properly remunerative scale of fees. Actually it puts the profession on the same level as tradesmen, and should be abolished.

To accomplish this, the entire profession should be agreed upon a definite course of action. That is the first argument in favour of unity. The second lies in the fact that surveyors have allowed public bodies to establish various scales of fees, which differ radically one from another, and are all too low. These scales will remain until all the members of the profession have united in their desire to obtain unification and improvement.

The third ground for discontent is that very much work is carried out without reference to quantity surveyors in any way. This, again, will not improve without united effort. The fourth lies in the fact that the means of entering the profession are too casual and indiscriminate.



The Church, Woodcroft Hall, Burnt Oak, Middx. Designed by Sir John Burnet and Partners for the Christian Brethren. Brick and stone have been used, with horizontal stone bands introduced through the brickwork leading up to the entrance doorway.

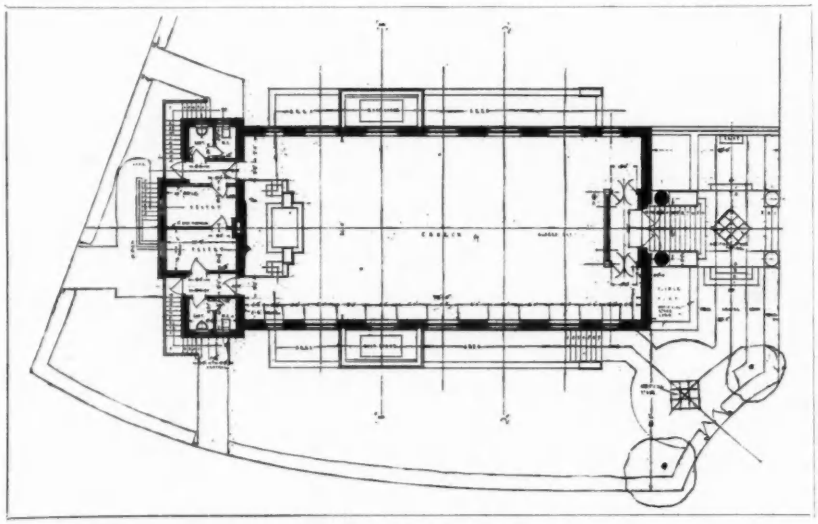
The first point is tending to lower the status of the whole profession, and is probably the most important. For the first time quantity surveyors have behind them a powerful Institution whose first function is to maintain the dignity of the profession, and as soon as the quantity surveyors express their unanimous desire to stop the practice of tendering they will get all help from the Council of the Institution. A general notification by the Institution to all public bodies—that it is not in the best interests of either party that they should ask for tenders, and that if there should be any doubt in their minds as to what may be an appropriate fee in any special instance, the Quantity Surveyors' Committee would advise the local body without charge—would, it is hoped, produce the desired effect. Imagine the effect of an invitation to architects to tender for designs for a town hall, or to accountants to name the fees for which they would carry out a certain audit. The architect cannot go in for a competition unless the conditions are approved by the R.I.B.A., and accountants are bound by similar professional rules. A general prohibition against tendering by quantity surveyors would be the first step towards raising the profession, and an indispensable preliminary to the establishment of a properly revised scale of fees.

The members of the Institution are banded together for two main reasons:

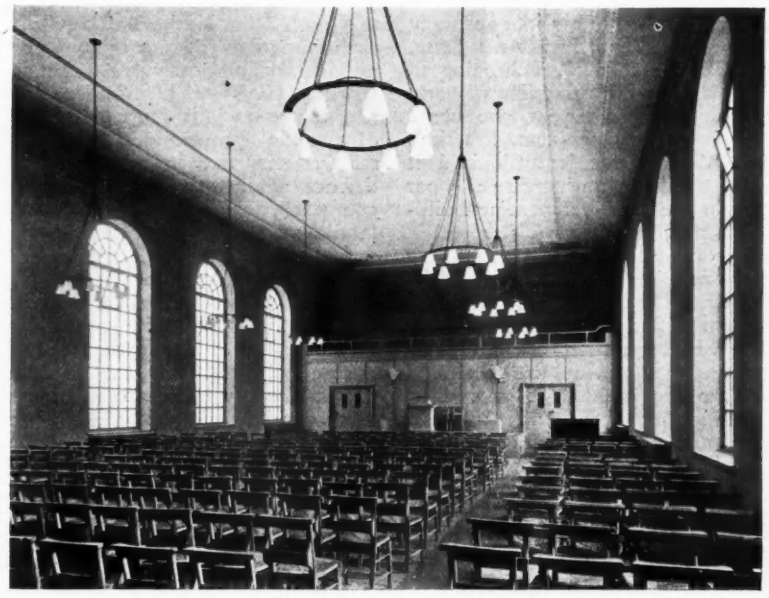
1: To make it known to the public that in resorting to members of the Institution they are dealing with qualified men; and

2: To uphold certain methods of practice and certain scales of remuneration.

The second function should not be confused with the first. It is in the interests of all, including those outside the Institution, to maintain a proper scale of fees, and from that point of view there would seem to be quite a good case for a new class of member, say, Licentiates (who could not use any letters or derive any benefit on the qualifying side, but merely conform to certain agreed rules). Alternatively, it might perhaps be better to follow the example of the accountants—stiffen the means of entering the



Ground-floor plan of the Church, Woodcroft Hall. In accordance with the beliefs of the Christian Brethren the design was carried out with the utmost simplicity, even severity, on the lines of the old Georgian mission halls.



Interior of the church, Woodcroft Hall, looking towards the gallery. The building is of simple design with a low wood dado; the walls are finished with sand-faced plaster off the wood float.

profession and eventually claim to be preferred by public bodies and companies when making appointments. This preference would probably be secured in any case by the greater confidence inspired by the members with the bodies who are most worthy of consideration.

There is no parallel to such a class of member in any other profession today. The Licentiates in the R.I.B.A., of whom there are about one thousand, were brought in between 1910 and 1912, and comprised all architects who had reached thirty years of age, who had been principals for at least five successive years, or had been engaged for at least ten years in the study of architecture. Twelve months after the list was opened it was closed. The architects in doing this drew in a large body of practitioners who would have been otherwise subject to no control or discipline. It seems that a similar movement by surveyors would be desirable in order to secure a solid foundation from which it would be possible to commence the consolidation of the whole profession.

The position of the auctioneers closely resembles that of the surveyors, but whereas the surveyors have a maximum scale of fees, the auctioneers have in many of their local branches a minimum scale of fees, as at Liverpool, Birmingham, Manchester, and other places. One never finds with auctioneers any tendering against each other; they all uphold their code.

The great distinction of the Chartered Institute of Accountants is that all its members must have been articled to a chartered accountant for five years. This almost has the effect of making chartered accountancy a closed profession, and is in many ways better than registration, which for them today would more than quadruple the number of their members. If introduced into the surveying profession it would do more to raise its status than anything else could do.

What is learned from the other societies and institutions? 1: That with the exception of the accountants, who are now considering the advisability of publishing one, surveyors have the distinction of being the only profession that has no published code, and the one which exercises the least amount of control over its members, also the only one that tolerates tendering.

2: That the profession of surveying could be virtually closed by resorting to articles of pupilage.

3: That most societies prefer to keep the fee scale elastic, but where it is given it is usually a minimum scale.

4: That united action is the only method by which any changes can be made.

Is it too much to hope that at an early date the committee will evolve some definite proposals for dealing with these matters?

The fee question, as is shown by the varied treatment of it by other societies, is most difficult. The chief points that present themselves are the following:

1: Does the present scale of the Surveyors' Institution meet all cases?

2: May those at the top of the profession charge more than scale, as with engineers?

3: May those at the bottom of the ladder charge less?

4: Can the scale be varied when there is a succession of jobs from the same source?

5: Should the scale be increased when there is liability for accuracy of work?

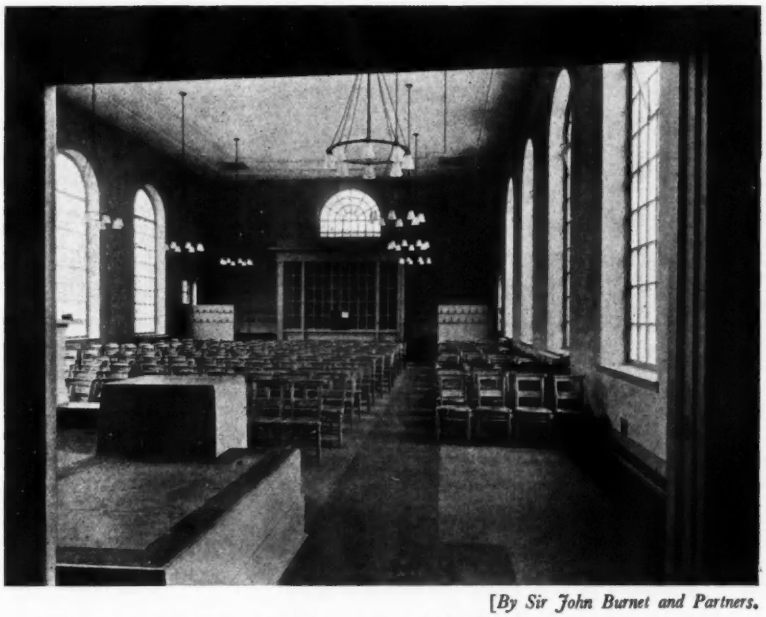
6: Should the scale be varied when the bills have to be presented in many sections?

7: What happens when there is repetition of whole buildings?

8: Time rates too low.

My own criticisms of the surveyors' present scale would be:

1: That it does not discriminate between utilitarian buildings and those



[*By Sir John Burnet and Partners.*

A view from the dais end of the church, Woodcroft Hall. It is 36 ft. wide and 78 ft. long, with seating capacity for approximately 500 persons. On the lower ground floor is a Sunday school, seating a similar number of children.

full of architectural treatment, which are obviously worth more.

2: That on works under £5,000 it marks no difference between taking off quantities and measuring additions, or work on schedule and pricing.

3: That it makes no reference to provisional sums.

4: That it does not deal with liability or responsibility.

5: I object to 50 per cent. reduction for engineering work unless qualified as to *what is* engineering.

In these respects it would be difficult to maintain it as it is not logically consistent. That is shown by the wide differences between the Surveyors' Institution's published fees and those agreed between various public bodies and many of its members. This circumstance does not help the Institution to uphold its own scale.

No surveyors should charge more than others except for special services of an unusual kind or for arbitration work, etc., and no younger members should be allowed to charge less than scale fees. Liability for substantial accuracy should be paid for at higher rates, say, 25 per cent., as it involves checking all taking off. For a constant flow of work, say, £100,000 in a year, we could afford to take 10 per cent. less than scale. When work is sectionized it should be paid by an increase of 5 per cent. In the case of repeating buildings the practice varies.

It is doubtful legally whether an owner can use an old bill of quantities and alter the heading and issue it as the copyright vested in the surveyor. As to the vexed question of provisional sums on the present low scales, I think we are entitled to charge on everything, but if we ever get the scale raised, and on a scientific basis, I should like to see this disturbing factor eliminated. Today the surveyors are standing at the cross roads—one leading to solidity and independence, the other to continued competition and indiscriminate haggling. They should pull themselves together and attack the opposing forces in a solid phalanx.

LITERATURE

REPORTS OF TWO PRESERVATION TRUSTS

Not long ago a member of Parliament asked in the House whether it would be possible to make a grant out of public funds to the National Trust to assist it in carrying out its work for the community. The reply (of course) was "in the negative," but the reason for the refusal I commend to Professor Trevelyan's notice. The National Trust, so the Minister affirmed, was not the only body concerned in works of this nature. Indeed, the only adverse criticism that can be made of this admirable pamphlet, *Must England's Beauty Perish?* is that it has a tendency to "push" the National Trust to the exclusion of the remaining bodies, municipal and otherwise, that are patently doing work of a similar nature.

In the main this pamphlet consists of a subtle appreciation of our small-scale scenery and its inherently weak defence against the ruthless invader, compared, for instance, with Switzerland's vast and all-absorbing landscape; a sympathetic analysis of the mental condition into which we, as mainly a town-dwelling nation, have fallen, pointing out quite logically, and as a matter of fact, what only an obtuse fool could deny, that to destroy natural beauty is to atrophy the soul of the nation; and lastly, a statement of the policy and achievements of the National Trust.

Of the first two parts there is little more to be said, for Professor Trevelyan has crystallized with admirable economy of statement what many of us have been thinking rather dimly for some time, but do we realize the extent of the National Trust's achievement? A few of the places—Box Hill, Blakeney Point, and the extensive preserves in the Lake District—are known by most people, but many large areas—for instance, Hatfield Forest—are comparatively unknown, and not many of us realize the number of interesting houses over which the Trust has control, and which can be visited "at all reasonable times" by the public. These last, indeed, are to many people the most pleasing of all the Trust's



The Old Priest's House, Muchelney. [*From* Must England's Beauty Perish?]

possessions, and one wishes that this side of their activities could be extended, for as in the Trust's opinion a house should be lived in, unless ruined, we are here given the rare opportunity of seeing these beautiful places under cheerful inhabited conditions and not in a gloomy state of dusty emptiness and depressing chastity with ropes across the chairs and railings round the beds (*vide* Holyrood House). One hopes, too, for an extension of the National Trust's policy for preserving agricultural belts in different parts of the country. Professor Trevelyan himself has always set a fine example in this direction. This is, indeed, a pamphlet to be read and re-read, and recommended all round.

Then there is also the *Annual Report for 1928* of another Trust of which Professor Trevelyan has acknowledged the existence in a footnote. This is the Oxford Preservation Trust, and the history of its activities during the past year makes encouraging reading. Oxford, in carrying through the improvement scheme in St. Aldate's, can be read about and acted upon with profit by the town and city councillors of many places in England and Scotland; so, too, with the method by which disaster has more or less been averted in Broad Street. (One wonders by the way whether it was necessary for the report to be so very cautious by only saying that "Broad Street's former beauty was [in the judgment of some] a little impaired by Mr. Waterhouse's new building of Balliol" —surely by this time we have learnt to be more explicit than that!) Lastly, one feels grateful to the Trust for facing the facts as regards electrical development. We must know that at this late hour it is useless to sit down and cry about the incongruity of the little lambs gambolling round the bases of the great steel masts that electricity has brought to our meadowlands. They must come, and the Trust, to its credit, admits that poles, at any rate, do not appear to be as hostile to the landscape as one would at first suppose, though the report does not seem so happy about steel masts. However, after reading an illustrated article on this subject recently in THE ARCHITECTS' JOURNAL, I personally felt that steel masts might in some cases prove rather an interesting addition to our landscape, though the concrete masts which are used in Provence seem, perhaps, to be the best solution of all. Did the Oxford Trust, I wonder, suggest this alternative to the electrical engineers with whom they talked the matter over?

P. HURD

Must England's Beauty Perish? By G. M. Trevelyan. Faber and Gwyer. 1s.
Annual Report of the Oxford Preservation Trust 1928.

LAW REPORTS

POLLUTION OF STREAMS: INJUNCTION GRANTED

Freshwater and Quinton v. *British Acetate Silk Corporation, Ltd. Chancery Division. Before Mr. Justice Clauson*

These cases related to the alleged serious pollution of the River Gipping and its tributary streams, by the discharge from the defendants' factory near Stowmarket, Suffolk, of matter that was detrimental to the streams and to the adjoining landowners. Plaintiffs sought injunctions to restrain defendants from polluting the stream.

Mr. Archer, K.C., for the plaintiffs Mr. and Mrs. Freshwater, opened the case and stated that his learned friend, Mr. Gavin Simonds, K.C., represented the second plaintiffs, Mr. A. E. Quinton and Mr. A. S. Quinton, trading as Quinton and Sons. Continuing, counsel said the pollution of the stream was serious, and proceedings were begun last year, and the defendants had, in consequence, erected a plant to deal with the pollution, but that plant was not effective as it only dealt with sulphuretted hydrogen. Mr. and Mrs. Freshwater had waited to see what happened, but the position was just as bad on July 25 last. The defendants had a new plant to cope with the nuisance. Mr. Freshwater was unable to sell his farm. A number of his cattle had died and the veterinary surgeon told him that nothing could be done so long as the cattle drank the river water. Mr. and Mrs. Freshwater were bound to keep the windows of their house closed all night. On July 25 last the stench from the river had made Mr. Freshwater physically sick. It was clear that the nuisance was due to the working of the defendants' factory, because on June 14 last the works were stopped, and on June 21 a sample of the river water was taken which showed it to be fairly clear. The working began again on June 24 and on June 28 a sample showed the water to be a very dark colour and to smell strongly. A public meeting of protest had been held, and in August 1928 an inquiry by the Minister of Health was held at Needham Market, and the inspectors visited the river and said that there had been gross pollution from what they had themselves seen and smelt. The report of the inspectors had never been published on the ground that private litigation was pending.

Mr. Bennett, K.C., for the defendants, said it might be that what his clients had been doing had caused a nuisance, but they had done everything that they could and the first plant and the second permanent plant, which was completed on July 22 last, covered two acres, and to get that in order caused some difficulty. £30,000 had been spent by the defendants, who were satisfied that the new plant would eliminate everything complained of in the actions. He asked that the motion should stand over for a month to see what happened as to the effect of the new plant.

His lordship granted injunctions in both cases, but suspended their operation for a month. He said, on the evidence there was a strong suspicion that there was a very serious nuisance, and that it must be imputed to the defendants, or, at any rate, that they were one of the polluters. The right course seemed to be to grant the injunction and suspend it till a time when the new plant, on the defendants' evidence, would be functioning properly—in four or six weeks' time.

LAND CLAUSES ACT: ACQUISITION OF LAND

Mizen Bros. v. *Mitcham Urban District Council. King's Bench Division. Before the Lord Chief Justice and Justices Avory and Branson*

This case raised interesting points, coming before the Court on a special case stated by an arbitrator.

Mr. Scholefield, K.C., for Messrs. Mizen Bros., said the point raised was whether the old rule, which applied under the Land Clauses Act and which gave compensation to an owner of land who was dispossessed for disturbance and other rights, disappeared with the advent of the Acquisition of Land Act, 1919, or still survived it. The notice to treat was served by the Council on Mizen Brothers in July last year after the Minister of Health had approved the acquisition of the Bordergate lands by the Council for a building estate. Mizen Brothers claimed a total of £43,585, which was reduced afterwards to about £37,000. To settle the dispute Mr. Hugh Webster was appointed as an arbitrator and heard evidence.

The special case stated by the arbitrator was to the effect that on July 5, 1928, at the date of the notice to treat, Mizen Brothers were cultivating in Mitcham, including the Bordergate land, about 150 acres, and it was the integral part of their business. The Bordergate lands had been under continuous cultivation for upwards of thirty years and this was of a highly intensive character.

At the time of the notice to treat, the land was ripe for immediate development for building; and, had the land been sold in the open market, the price

realized would have been £17,280, always provided vacant possession could be given. Mizen Brothers claimed to be entitled to £17,280, and, as well, any loss brought about by the removal of the greenhouses, etc., loss resulting from forced sale and removal of the plants or crops, and compensation for disturbance and loss of business. On the other hand, the respondent Council argued that the claimants were not entitled to combine in the same claim a valuation of their land upon the value of an immediate sale for building with vacant possession, and a claim for disturbance and consequential damage upon the footing of interference with a continuing market-garden business; that in arriving at the price of £17,280 it must be assumed that the claimants had abandoned all intention to continue the user of the land as a market garden; that there should be no damage for disturbance unless the value of the land was based upon user for market-garden purposes, and that there was no ground for the claim for consequential damage. Counsel for the claimants argued that his clients, in addition to receiving the value of the land, were entitled to be compensated for all damage consequent upon their being compulsorily dispossessed; and that therefore there should be an award for trade fixtures, tenant right, and disturbance. The arbitrator ordered that the claimants should receive £17,280, and left to the Court the question whether they were entitled to receive compensation for tenant right, trade fixtures, and disturbance in addition to the amount due for the land if sold in the open market to a willing seller with vacant possession.

Counsel's contention was that the arbitrator's award was inadequate as his client's business had been fully disturbed.

Mr. Stafford Cripps, K.C., for the Council, submitted that if the claimants dealt with the property solely as a business they might get £12,000 and another £4,000 for tenant's rights, etc., which was less than the Council would pay for the land with vacant possession.

The Court referred the matter back to the arbitrator.

The Lord Chief Justice said the answer to the question whether the claimants were entitled to compensation for tenant right, trade fixtures, and disturbance, in addition to the amount due if the land was sold to a willing purchaser with vacant possession, was "no."

A new catalogue of second-hand books on Fine and Applied Arts has been issued by Messrs. W. & G. Foyle, Ltd., 121 Charing Cross Road, W.C.2, from whom copies may be obtained.

READERS' QUERIES

OWNERSHIP OF A DITCH

R. H. writes: "*The site of my house is between two roads, and is adjoined on each side by vacant land. There is an iron fence with a hedge on the inner side facing each road. On the road sides of the fences are ditches. New roads have been constructed this last few months, and a footpath is being formed on one of the roads. The municipal authority, in making the footpath, have filled in the ditch and have brought the footpath up to my iron fence, which, I might add, was in position when I purchased the land. On the other side of the site the ditch still remains, as the footpath has not yet been finally completed. Does not my land stretch to the road side of the ditch, and shall I be in order in taking the ditch into my land if so desired? What should be my attitude towards the municipal authority who have already filled in the ditch and brought the footpath up to my hedge? The footpaths are exceptionally wide, in fact they are almost as wide as the roadways.*"

The question of ownership of a ditch is always one of difficulty. The presumption is that it is owned by the party whose fence is on the far side of it. The presumption may be rebutted if the ditch formed part of the property conveyed to you or your predecessors in title. In the absence of perusing the deeds it is not possible to express an opinion in the matter. From the facts, and on the assumption that nothing is found in the deeds to displace it, I am of opinion that you do not own the ditch, and in these circumstances you would have no claim against the corporation or either the owner of the ditch from using it for the purposes mentioned in the question now before me.

In the event, however, of it being found from perusing the deeds that the ditch is your property, having been included in the conveyance to yourself or your predecessors in title, it may be found upon investigation that the municipal authority are exercising their statutory powers in using the ditch in the manner which they have done. In such case it would be necessary to peruse the Act under which the municipal authority have acted in order to see what remedy (if any) you have against them for taking your land.

H. F. I.

ARTIFICIAL PATINAS ON COPPER OR BRONZE SHEETING

O. W. B. writes: "*Which is the best and easiest method of producing a green colour upon copper or bronze sheeting?*"

Although it is a comparatively simple matter to produce green colourings by the application of chemical solutions, the many methods of treatment commonly adopted do not always give a colour which satisfactorily resembles the natural patina acquired under the influence of time and weather.

Natural patina is produced by a slow process of corrosion, and it is not always a green colouring which results. Bronze consisting of nine parts of copper to one part of tin usually gives a reddish brown patina with just the slightest trace of green, whereas the more distinctly greenish hues are produced by bronzes with a lower copper content, and especially by those in which an appreciable amount of zinc is incorporated.

When artificial means are adopted for the production of an artificial patina, the same thing happens, and although it is desired to obtain a *green* colouring, the actual colour produced will not always be that particular shade of green one had in mind. In some cases a method of treatment which has hitherto given satisfactory results may—without warning—produce a very poor resemblance to the natural patina, and without doubt the method of treatment will be blamed for this, whereas it may be the composition of the metal sheeting which is really responsible for the actual shade of colour produced.

On large surface areas green colourings are most easily obtained by the repeated application of a 5 to 10 per cent. solution of sulphide of ammonia. This solution should be wiped over the metal, at intervals of a day or two, until the desired colouring is obtained. Sometimes five or six applications may be necessary.

For an alternative treatment, dissolve 16 oz. of French verdigris and 8 oz. of salammoniac in one gallon of strong acetic acid, and wash the surface of the metal with this solution, allowing each application to dry exposed to the action of the air. When the desired effect has been obtained, wash down with clean water, allow the surface to dry thoroughly, and then brush it with a dry brush to remove any loose corrosion. The clean-tinted surface thus obtained should then be coated with pale varnish to prevent any change in colour taking place under the action of the atmosphere.

A very close resemblance to natural patina may also be obtained by merely painting the surface of the copper or bronze with French verdigris finely ground in varnish which has been thinned out with turpentine. The mixture of varnish and turpentine used should be in such proportions that an eggshell gloss is produced in the finished coat, and it is upon the care exercised in this direction that the "natural effect" largely depends.

C. H. B.

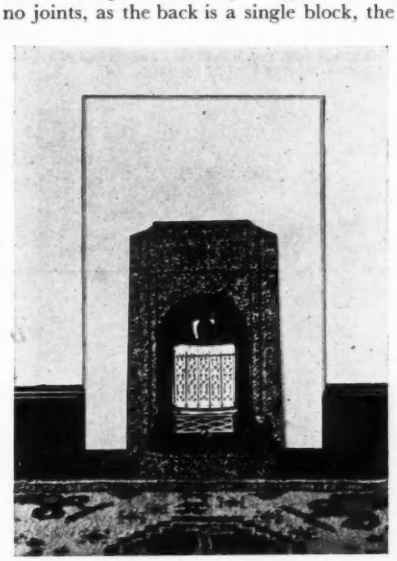
TRADE NOTES

Beating the Four Winds is an interesting story of a household talk around a smoky fire during which the guest dissertates on the advantages of the Sankey down-draught preventing pot. "The 'Sankey' pot, says the guest, is made up of specially curved elongated louvres—it has three rows of them—and if the wind blows *down* the chimney the louvres deflect it out of the side; if it blows hard on to the *side* of the pot, the louvres deflect it upwards. Indeed, the wind cannot go any other way. The pot is round and the louvres deep and ingeniously arranged in a complete circle, thus the 'Sankey' pot really does trap every wind that blows and prevents down-draught. More remarkable still, though, it actually *pulls the smoke up*." "I urged Jones," he says, "to try one of these pots; he was only converted by his builder demonstrating to him with a little model of the 'Sankey' down-draught preventing pot. Any builder who supplies a 'Sankey' pot can demonstrate to you with one of the models, and you can prove its efficiency for yourself. You will see, too, Mrs. Citizen, how impossible it is for a pot of that construction to fail to trap the wind. The louvres are *all round* the pot."

The exhibition of Modern Advertising by Greenly's, held at the Royal Watercolour Society's Gallery, Pall Mall East, S.W., contained over sixty examples of the firm's latest achievements in the daily and technical Press. Here were to be seen advertisements on many subjects; advertisements that tell their story at a glance, daring excursions into pure modernism; jolly snapshots combined with "selling" stories; "teaser" campaigns with ideas. In the credo to the catalogue it is stated: We have no formula for creating advertisements. We cannot follow the doctrinaire designers to whom the art of typography is sacred. We are modernists on occasion; realists usually. We are all things to all men. And always the purpose is before us. It rules like a mandarin. It may dictate the inclusion of a multitude of details which dismay the layout man. It may bar a sophisticated illustration which is "beyond" the mass mentality. It may present an entirely different problem where the wealthy few must be tickled with whimsicality. Such are the restrictions of the craft of advertisement design. Yet together with all these new factors of the psychology of selling stand the old lasting principles of all beautiful things: balance, simplicity, restraint. Out of them all is coming this new art-form, this true expression of our time.

The British Industries Fair, Birmingham, 1930, will be held under the patronage of the Lord Mayor of Birmingham, and will be organized and controlled by the Birmingham Chamber of Commerce (Incorporated) under the ægis of the Board of Trade and the Birmingham City Council. It will be held at Castle Bromwich, Birmingham, concurrently with the London section, from February 17 to 28, 1930, in the exhibition buildings, adjoining L.M. & S. Railway Station, Castle Bromwich. The success of the ten previous fairs has been pronounced and progressive. All the available space was occupied, although the buildings have been extended since 1927 by 250,000 sq. ft., and it was necessary to organize an outside section of 50,000 sq. ft. On this occasion it is hoped to add a further extension of 65,000 sq. ft. The Fair is open only to exhibits made by British manufacturers and to British wholesale firms taking the whole output of a British factory or holding the sole selling rights of patented or proprietary articles manufactured in the British Empire. Applications for space should be made to the General Manager, British Industries Fair, Chamber of Commerce, Birmingham, at the earliest possible date.

The Storey gas fire unit has been evolved by a firm of gas-heating engineers in collaboration with an architect, and is in some measure the outcome of an article on gas fires and their settings, which appeared in *The Architectural Review* of February 1929. The aim has been to attempt some unity of thought in design and to produce at a low mass-production figure a register back and base or "stand" which shall be of sufficient size to take its place in the room, just as a well-designed radiator or closed stove does, and which shall thus be the *raison d'être* of the gas fire, which follows its lines and fits closely to it. This back, with its base-block, is made of vitrified stoneware, glazed in a variety of good, clear colours; it is practically indestructible and is easily cleaned with a damp cloth; fixing is easy; there are no joints, as the back is a single block, the largest it is possible to fire in the kiln without twisting (it stands 2 ft. 1½ in. high); and an efficiently designed flue vent is provided to both back and gas fire. The gas fire deviates very little from the standard trade patterns, though much experiment has gone to the making of the burner; it has been designed primarily to be in scale with the back, and some thought has been given to the details of the feet and the silver-plated fret.



The Storey gas fire unit, which has been specially designed for manufacture at a low mass-production figure.

Messrs. J. J. Williams were the general contractors for the Tandridge Golf Club (pages 318-21). James Gray Ltd. were responsible for the heating.

COMPETITION CALENDAR

December 7. The Provost, Magistrates, and Councillors of Dumfries invite architects practising in Great Britain to submit competitive designs for the Town Hall and Municipal Offices, which it is proposed to erect on the site of the old Town Hall and of the Municipal Offices, Dumfries. Assessor: Sir George Washington Browne, P.R.S.A. Premiums: £300, £200, and £100. Application for conditions of competition, etc., should be made to R. A. Grierson, Town Clerk, Town Hall, Dumfries. Deposit £2 2s. Latest date for sending in designs: December 7.

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, London, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

24388. Lyne, R. J. Window frames. August 9.

24379. Aldam, E. H. Sliding and folding doors, &c. August 9.

SPECIFICATIONS PUBLISHED

316564. Marks, A. H., and Russell, P. (Ruyter, E.). Compound asbestos-cement sheets and slabs.

316766. Smith, W. H. Woodworking apparatus.

316771. Midland Railway Carriage and Wagon Co., Ltd., and Champeney, C. C. Flooring material.

ABSTRACT PUBLISHED

313645. Buck, H., 42 Gondar, West Hampstead, London. Sliding window holders, &c.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The Downham 'R.D.C.' has acquired a site for a housing scheme at HILGAY.

The Chelsea Housing Improvement Society, Ltd., is to erect another block of dwellings on the World's End Passage area, CHELSEA.

The CROYDON Corporation has obtained sanction for a loan of £6,000 for the erection of five shops and dwellings at Mitcham Road.

The Education Committee has obtained sanction for a loan of £20,000 for the extension of Waddon School, CROYDON.

The Peabody Donation Fund is negotiating with the CHELSEA B.C. for a lease of the Manor Street site for the erection of dwellings.

It is expected that work on the building of the new wing of the London County Hall at WESTMINSTER will be started about February of next year. The cost of the work will be in the neighbourhood of £600,000, and tenders will be invited about November.

A site has just been bought for the new Mohammedan mosque to be erected in London. Situated at WEST KENSINGTON, the site is a little under 50,000 sq. ft., and the price paid was £28,000. The total cost of the work will be in the neighbourhood of £100,000, of which sum £75,000 has been collected.

Plans passed by the WANDSWORTH B.C.: Additions, Anglo-American Laundry Co.'s premises Burmester Road, for Mr. N. K. Humphries; factory for Colzium Pleating Co., Buckbold Road, for Messrs. W. F. Blay, Ltd.; factory, Point Pleasant, for Messrs. G. Parker and Sons, Ltd.; two houses, Telford Avenue, Streatham, for Mr. B. C. Utting; four houses, Minehead Road, for Mr. A. E. Kerven.

SOUTHERN COUNTIES

The OXFORD Corporation are to provide another 240 houses on an estate at South Park.

The Berkshire Education Committee is to erect a senior school at DIDCOT.

The Berkshire Education Committee is to erect an elementary school for about 200 children at CUMNOR.

The OXFORD Corporation has decided to purchase 32 acres of land on the Cutteslowe estate for housing purposes.

The Surrey Education Committee has had plans prepared for extensions at the GUILDFORD Grammer School.

The GUILDFORD Corporation is offering the Surrey Education Committee a site on the Stoke Park estate for the erection of a technical institute.

The OXFORD Corporation Housing Committee has approved plans and specification for the erection of 239 houses on South Park and has authorized the city engineer to obtain tenders.

The governors of the WALLINGFORD Grammar School have prepared a scheme for the erection of an assembly hall, cookery, and dining-room and library room.

The OXFORD Corporation recommends acceptance of an offer from the curators of the University Chest to purchase the St. Aldate's Street improvements site at the price of £19,000 the Corporation to rehouse the existing tenants of these cottages.

Plans passed by the MARGATE Town Council: House, Westbrook Avenue, for S. O. Eeles; garage and washhouse, 91 Westbrook Avenue, for S. O. Eeles; addition, "Bronhawen," Westbrook Avenue, for T. Wing; garage, The Bungalow, All Saints' Avenue, for G. T. Keane; interior alterations, The Homestead, St. Peter's Road (conversion to five flats), for C. Neil; additional story, 9 Dalby Square, for P. Levett; house, Northumberland Avenue (plot 81), for Palm Bay Estates, Ltd.; garage, Leicester Avenue, for Palm Bay Estates, Ltd.; house, Leicester Avenue, for Foster and Barber; internal alterations, additional w.c., house in course of construction, plot 82, Northumberland Avenue, for Palm Bay Estates, Ltd.; lock-up shop, 79 King Street, for W. Pay.

Plans passed by the OXFORD Corporation: Extensions, 131 Cowley Road, for Messrs. F. Whitford and Son; sixteen houses, Wytham Street, for Messrs. T. H. Kingerlee and Sons; additions, Old Swan Brewery, Paradise Street, for Messrs. G. Weekes and Sons; house, Sandfield Road, for Mr. J. G. Laithwaite; house, Chestnut Grove, Headington, for Mr. E. Kimber; two houses, Bickerton Road, Headington, for Messrs. F. Betts and Sons; house, Stratfield Road, for Mr. J. Parsons; house, Sandfield Road, Headington, for Mr. F. Church; house, Sandfield Road, Headington, for Mr. J. C. Arrowsmith; house, Stephen Road, Headington, for Mr. W. Lay; pavilion, Woodstock Road, for Messrs. Morris Motors (1926), Ltd.; new church, Pile Road, for the Building Committee of Temple Cowley Congregational Church; four houses, Cowley Road, for Messrs. G. C. Pipkin and Son; alterations, 130 High Street, for Messrs. Fribourg and Treyer.

SOUTH-WESTERN COUNTIES

The PAIGNTON U.D.C. has obtained sanction to undertake cliff protection works at Roundham Head at a cost of £10,000.

Plans passed by the PAIGNTON U.D.C.: House, Princes Street, for Mr. L. Pearse; five houses, Laura Grove, for Mr. F. Binmore; shop and flat, Torquay Road, for Mr. W. Sagar; bungalow, The Grove, Yalberton, for Mr. J. H. Maunder; nine houses, St. Mary's Hill, for Mr. W. Mead.

Mr. William Roseveare, a Torpoint architect, has prepared plans for a tunnel under the River Tamar at PLYMOUTH, linking Devon and Cornwall. He has given consideration to the proposed scheme, and at a meeting of the General Committee of the Plymouth Mercantile Association he said that he estimated that a sum of approximately £875,000 will be involved for the construction of tunnels for vehicular traffic and pedestrians. This figure does not include the purchase of the present ferry, neither does it include the purchase of any land for the purpose of constructing the tunnel, but embraces everything necessary for the satisfactory completion of the works he had detailed at a previous meeting of the Association. The committee has decided to recommend their members to give their support to the Plymouth City Council in any steps which might be taken to construct the tunnel.

EASTERN COUNTIES

The NORFOLK C.C. has decided upon the provision of another forty library centres.

The Norfolk Education Committee has prepared plans for the erection of a junior school at FREETHORPE. The cost is estimated at £3,800.

The NORFOLK Education Committee is to improve and extend the Fakenham Secondary School at a cost of £3,700.

Norwich and Yarmouth Corporations have decided in favour of the proposal that the Norfolk C.C. shall take over the STANNINGHALL tuberculosis colony.

The Norfolk C.C. has had under consideration plans prepared by Messrs. Boardman and Sons, the Council's architects, for providing additional offices on the Thorpe Road site, NORWICH.

The NORFOLK Education Committee has prepared plans for the erection at Terrington St. Clement of a central school at a cost of £8,000, and a junior school at a cost of £2,000. A teachers' house is also to be provided.

Plans have been approved by the NORFOLK Education Committee for extensions at Thetford Boys' Grammer School, provision being made for a laboratory, gymnasium and work rooms at a cost of £8,650.

MIDLAND COUNTIES

The GLOSSOP Corporation is to carry out alterations and repairs at the Town Hall and the markets.

The Abbey Hulton Social Club is to purchase land for the erection of club premises at the Abbey Housing Estate, STOKE-ON-TRENT.

The Stoke-on-Trent Corporation has instructed the city surveyor to submit a layout plan of land for housing purposes at GOLDENHILL.

The Stoke-on-Trent city engineer has prepared a layout of a housing site near Little Chell Lane, TUNSTALL.

NORTHERN COUNTIES

The CONISBOROUGH Council are to build fifty-four houses at a cost of £23,200.

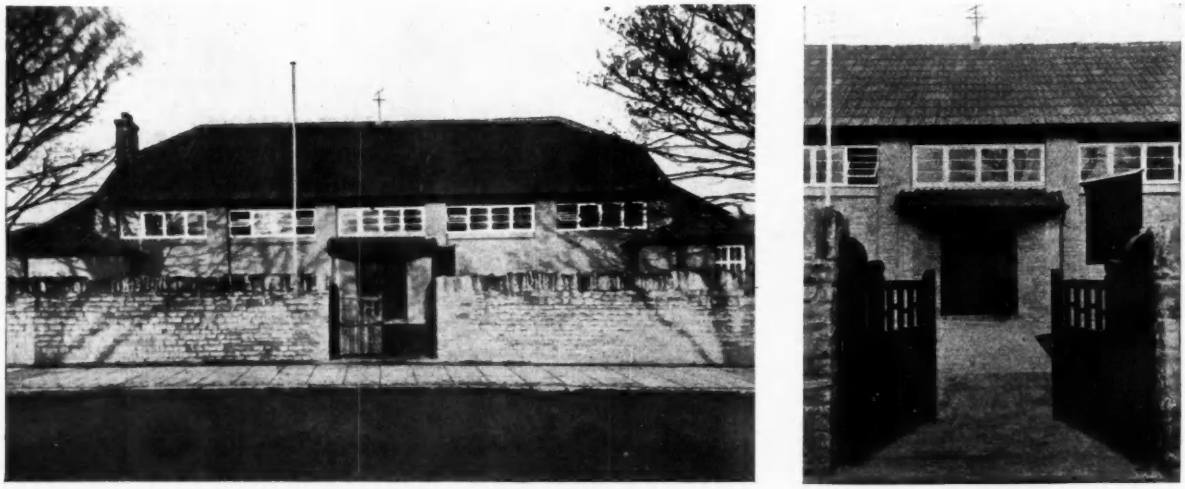
The West Riding C.C. is to purchase 48 acres of land at MARTON for the provision of small holdings.

Provision of a new Town Hall is being considered by the CREWE Town Council.

The Durham County Education Committee has voted £18,000 for the erection of an elementary school at BOLTON.

The West Riding C.C. is purchasing the Hall Farm, WHITGIFT, containing approximately 308 acres of land, for the provision of small holdings, the total cost being estimated at £18,000.

The proposed Mohammedan Prayer House to be erected in SOUTH SHIELDS is to be situated on a piece of vacant land abutting on Academy Hill and Payne's Bank, in East Holborn. The proposed building will be carried out in Eastern style, and will have a centre dome, smaller domes, and minarets. On the first floor will be the large prayer house capable of accommodating 100 worshippers. Access to it will be through the outer adjuncts of the building where spacious baths will provide facilities for such washings and purifications as the Mohammedan religious rites demand.



Church Lads' Club, Stamford. Designed by Traylen and Lenton. The front façade (left) and the entrance doorway (right) which gives immediate access to the clubroom. The building is of brick with a pantiled roof.

Plans for the reconstruction of the Café Royal, Peter Street, MANCHESTER, have been approved by the Manchester licensing justices. The new restaurant will be four storeys high.

A large island site in CARLISLE has been purchased for the purpose of erecting a super cinema to seat 2,000 people. Plans have been prepared by Messrs. Percy Browne and Sons.

The Royal Oak Hotel, KESWICK, the new right wing of which was destroyed by fire last February, is to have another new wing built. The cost is in the region of £20,000.

The Rev. F. W. Kershaw has submitted to the Board of Education a revised scheme for extensions at St. Ethelbert's Roman Catholic School, BOLTON, providing accommodation for an additional 250 children.

The BOLTON Corporation is to apply for sanction to borrow £135,813 for the provision of new wholesale and retail fish, fruit, and vegetable market buildings, and other offices, on a new site in Blackhorse Street.

The SEAHAM HARBOUR U.D.C. has interviewed the Ministry of Transport's northern representative regarding the Council's proposal for the construction of a bridge and road works near Seaham station. They have decided to interview the county surveyor on the general question of urgently required road construction in the district.

A new cinema, to be known as "The Avenue," is in course of erection at Blackgate, COXHOE, near the Four Road-ends. Seating accommodation is being provided for 700. Ample exits are being provided, also a large waiting room. The estimated cost of the building is between £4,000 and £5,000. The architects are Messrs. Hayes & Gray.

Plans passed by the KEIGHLEY R.D.C.: Two subsidy bungalows, Daleside Road, Riddlesden, for Messrs. W. and H. Whitaker; subsidy bungalow, Sandbeds, Morton, for Mr. C. Houldsworth; subsidy bungalow, Sandbeds, for Mr. E. Patchett; extension of weaving shed at Eastburn Mill, for Messrs. E. A. Matthews & Co.; cinema operating and winding room at the Parish Hall, Sutton, for Sutton Church trustees.

The scheme of the LANCASHIRE County Council and the LEIGH Corporation for the deepening and widening of the brooks forming the River Glass, which runs into the Ship Canal at Hollins Green, has commenced. It is anticipated the work will take about eighteen months or two years, and the cost will be about £24,000, the expense being borne by the Lancashire County Council, the Leigh Corporation, various colliery companies affected, and the owners of land along the bank.

Plans have been passed and work is to begin at once on the building of the new church of St. Cecilia at Truebrook, LIVERPOOL. The new church is designed to accommodate 600. It will follow the ecclesiastical Roman style which will be carried out in a variegated brick with dressings of Portland stone. The interior is to be divided up into a large nave covered by a barrel vault with intersecting lunette windows; the aisles being covered by a groined vault, the intersection of which is concentric with the arches of the main arcade. A large and spacious sanctuary is to be provided in which it is proposed to have a marble altar, behind which is a large panel to the apse carried out in coloured enamels. Plans have been prepared to the designs of Mr. E. Bower Norris, F.R.I.B.A.



Houses at Enham Village, Hants. Designed by W. Harding Thompson.

IRELAND

The BELFAST Harbour Commissioners have decided to embark upon a scheme for the provision of a new dock on the County Antrim side of the harbour, with an approach direct from the sea, at an estimated total cost of £376,000.

SCOTLAND

The GLASGOW Corporation is to acquire 70 acres of land at Carnwadrie for a housing scheme.

The GLASGOW Education Committee is to erect an elementary school at Ruchill.

The GLASGOW Corporation has decided to repair roofs at the markets at an estimated cost of £7,400.

The GLASGOW Corporation has obtained sanction for a loan of £2,893,000 for further housing schemes.

The GLASGOW city engineer has prepared sketch plans for new libraries for the Gorbals and Pollokshaws districts at a cost of £45,000.

The GLASGOW Corporation has purchased a site at the corner of Rhymer Street and Glenbar Street for the erection of a child welfare centre.

Plans have been approved by the GLASGOW Corporation for the erection of a police station in South Wellington Street at a cost of £5,000.

A scheme has been prepared by the GLASGOW Corporation for the construction of loading banks and sidings at Merklands wharf at a cost of £21,000.

The Western Heritable Investment Co., Ltd., has obtained additional ground at King's Park, Aikenhead estate, upon which to erect 756 further houses, and the GLASGOW Corporation has agreed to pay subsidy in respect thereof.

Messrs. Breeze, Paterson and Chapman, on behalf of Messrs. Mactaggart, have obtained the approval of the GLASGOW Corporation to erect large blocks of residential flats, eight storeys in height, along the frontage to Great Western Road.

The following figures show the progress that has been made in State-aided housing schemes in SCOTLAND to July 31, 1929: 1919 Act, 25,129; by public utility societies, 421; private subsidy schemes (1919 Additional Powers Act), 2,324; slum clearance schemes, 10,165, under construction, 2,115; 1923 Act, by local authorities, 4,012; by private enterprise, 15,981, under construction, 2,233; by public utility societies, 80; 1924 Act, by local authorities, 36,033, under construction, 8,633; by private enterprise, 966, under construction, 1,177; by public utility societies, 127; demonstration houses, 17; steel houses erected on behalf of Government by Scottish National Housing Company, 2,552. Total completed, 97,807. Total under construction, 14,158.

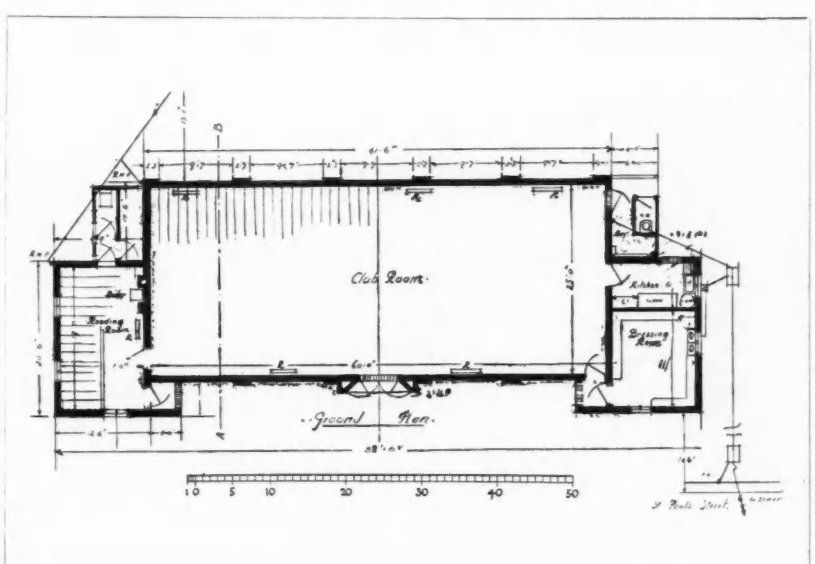
WALES

The first pithead baths in North Wales are being built at a cost of £25,000 for men engaged at the Llay Main Colliery, near WREXHAM.

MISCELLANEOUS

The African Theatres, Ltd., is to erect a hotel at the corner of Adderley Street and Riebeck Street, CAPE TOWN.

The DOUGLAS Town Council has approved plans for improvements and extensions at Villa Marina, embracing veranda, colonnade, shops and arcade, at an approximate cost of £42,322.



Ground-floor plan of Church Lads' Club, Stamford. Designed by Traylen and Lenton. A photograph of the main entrance is reproduced on page 328. There are also two subsidiary entrances, one on either side of the building.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_2	Barnard Castle	N.E. Coast	1 6	1 1½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_2	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury ..	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster ..	Yorkshire	1 7½	1 2½
B	Dorchester ..	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich ..	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A]	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EAST-BOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
*A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour*; LABOURER, 1s. 4d *per hour*; NAVVY, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6	*Trailer*	£0	15	0
Thames ballast, per yd.	0	10	0	*Steam roller*	4	5	0
Pit gravel, per yd.	0	15	0	*Water cart*	1	5	0
Pit sand, per yd.	0	12	6				
Washed sand, per yd.	0	13	0				
Cart and horse	£1	3	0				
3-ton motor lorry	3	15	0				
Steam lorry, 5-ton	4	0	0				

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; BRICKLAYER, 1s. 9d. *per hour*; PLUMBER, 1s. 9d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour*; LABOURER, 1s. 4d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	0
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	0	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0

Cement and sand, see "Excavator" above.

Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour*; DO. *fixer*, 1s. 10d. *per hour*; LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator." etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour*; TILER, 1s. 9d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

	Med. Grey	Med. Green
Portmadoc Ladies		£13 0 0
Countess		25 0 0
Duchess		32 0 0
Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6	7 0
Grey-green do.	5	9 0
Green peggies, 12 in. to 8 in. long	4	13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6

Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour*; JOINER, 1s. 9d. *per hour*; LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	4
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	3
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	9
DO. framed in floors, roofs, etc., per ft. cube	0	5	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ¾ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour (plus allowances in London only);* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¼ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, 3/16 in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.
The measured work price is on the same basis . . . per ft. sup. £0 0 2½

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 3/16 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¼ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			⅝ in.			¾ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3.	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, SEPTEMBER 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

BRITISH MUSEUM, Bloomsbury, W.C. A Selected Subject. 12 noon. "Early Greece (Crete and Mycenæ)." 12 noon. "Early Age of Italy (Etruscans, etc.)." 3 p.m. **12 noon.**

THURSDAY, SEPTEMBER 5

BRITISH MUSEUM, W.C.1. "Origins of Architecture—I (Greek)." By Cecil Hallett, B.A., F.S.A. 12 noon. "Early Britain—I (Old Stone Age)." By Cecil Hallett, B.A., F.S.A. 3 p.m. **12 noon.**

FRIDAY, SEPTEMBER 6

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 7

Sunrise, 6.21. Sunset, 7.34.

BRITISH MUSEUM, W.C.1. "Early Britain—II (Late Stone Age)." By Cecil Hallett, B.A., F.S.A. **12 noon.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Sculpture." By T. F. Wilson. F.R.S.A.I. **3 p.m.**

THE LONDON SOCIETY, Lancaster House, S.W.1. Visit to Lansdowne House, Berkeley Square, W.1. Applications for tickets to the Secretary of the Society.

MONDAY, SEPTEMBER 9

ARCHITECTURAL ASSOCIATION. Annual Excursion to Germany. Departure for Hamburg in s.s. "St. Louis."

TUESDAY, SEPTEMBER 10

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS. See entry under date of September 17, re visit to Wolverhampton.

ARCHITECTURAL ASSOCIATION. Tour to Germany. Arrival at Hamburg.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture—I." 12 noon. "Architecture—II." 3 p.m. Both by L. O. Faraker. **12 noon.**

WEDNESDAY, SEPTEMBER 11

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 12

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. **12 noon.**

INTERNATIONAL HOUSING AND TOWN PLANNING CONGRESS opening at Rome. Open until September 22. Particulars from the Organizing Secretary, Mr. H. Chaoman, 25 Bedford Row, W.C.1.

FRIDAY, SEPTEMBER 13

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Tudor and Jacobean Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 14

Sunrise, 6.12. Sunset, 7.18.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to Croydon Aerodrome. Meet main entrance 2.50 p.m. **2.50 p.m.**

WELSH SCHOOL OF ARCHITECTURE, Technical College, Cardiff. Latest date for submission of application forms.

MONDAY, SEPTEMBER 16

BRITISH MUSEUM, Bloomsbury, W.C. "Monuments of Egypt—II," "Greek Sculpture—II." Both at 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Persian Metalwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

TUESDAY, SEPTEMBER 17

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Pottery." By L. O. Faraker. **12 noon.**

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS. London and Home Counties Branch. Visit to Messrs. Mander Bros. Works, Wolverhampton. Meet outside entrance gates No. 3 Platform, Paddington. Depart 9 a.m. Party limited to fifty. Applications to Joint Hon. Branch Secretaries, 1 Wilbraham Place, S.W.1, before September 13.

WEDNESDAY, SEPTEMBER 18

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Metalwork." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Medieval Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

BRITISH MUSEUM, Bloomsbury. W.C. "Origin of Architecture." By Cecil Hallett, B.A.

FRIDAY, SEPTEMBER 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "The Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. **12 noon.**

SATURDAY, SEPTEMBER 21

Sunrise, 6.42. Sunset, 7.3.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chippendale." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to Westminster Cathedral. Meet main entrance 2.15 p.m. **2.15 p.m.**

THE LONDON SOCIETY, Lancaster House, S.W.1. Visit to Coal Exchange and the Roman Hypocaust, 96 Lower Thames Street, E.C. Applications for tickets to the Secretary of the Society.

MONDAY, SEPTEMBER 23

BRITISH MUSEUM, Bloomsbury, W.C. "Arts and Customs of Ancient Egypt—II." 12 noon. "Records of Babylon and Assyria—I." 12 noon. "Greek Sculpture—I." 3 p.m. "Monuments of Egypt—II." 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. 12 noon. "Italian Renaissance Furniture." 3 p.m. **12 noon.**

TUESDAY, SEPTEMBER 24

BRITISH MUSEUM, Bloomsbury, W.C.1. "Early Britain—III." 12 noon' "Greek Sculpture—II." 3 p.m. "Monuments of Assyria." 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W. "French Renaissance Furniture." 12 noon. "French Eighteenth-century Furniture." 3 p.m. **12 noon.**

WEDNESDAY, SEPTEMBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." 3 p.m. **3 p.m.**

THURSDAY, SEPTEMBER 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Seventeenth-century Furniture." 12 noon. "English Eighteenth-century Furniture." 3 p.m. "Jade and Lacquer." 7 p.m. **12 noon.**

FRIDAY, SEPTEMBER 27

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." 12 noon. "Chinese Sculpture." 3 p.m. **12 noon.**

SATURDAY, SEPTEMBER 28

Sunrise, 6.54. Sunset 6.54.

BRITISH MUSEUM, Bloomsbury, W.C.1. "Monuments of Assyria—II." 3 p.m. "Greek Sculpture—II." 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. 12 noon. "Ironwork." 3 p.m. **12 noon.**

THE LONDON SOCIETY, Lancaster House, S.W.1. Visit to Guy's Hospital, St. Thomas's Street, S.E.1. Applications for tickets to the Secretary of the Society.

MONDAY, SEPTEMBER 30

ROYAL SANITARY INSTITUTE, 90 Buckingham Gate, S.W.1. Opening of the Autumn session of training courses for examinations for sanitary inspectors, smoke inspectors, associateship (general hygiene and sanitation), associateship (food, hygiene, and sanitary science). Particulars obtainable from the Secretary at the above address.

WELSH SCHOOL OF ARCHITECTURE, Technical College, Cardiff. Opening of session.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. **12 noon.**

THE ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. "Sanitary Inspectors Course." Commencing at 6 p.m. **6 p.m.**

SATURDAY, OCTOBER 5

Sunrise 7.6. Sunset, 6.30.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to London Telephone Exchanges—City, Central, and Trunk. Meet G.P.O. (South), Carter Lane, E.C.4, at 2.15 p.m. **2.15 p.m.**

MONDAY, OCTOBER 7

LONDON UNIVERSITY, Gower Street, W.C. Opening of Session.

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. Opening of Session.

THURSDAY, OCTOBER 10

BEDFORD COLLEGE, Regent's Park, N.W. Opening of Session.

THURSDAY, OCTOBER 17

ARCHITECTURE CLUB. At the London School of Economics. Supper Discussion. Report as to arrangements. **5.45 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. **12 noon.**

MONDAY, OCTOBER 21

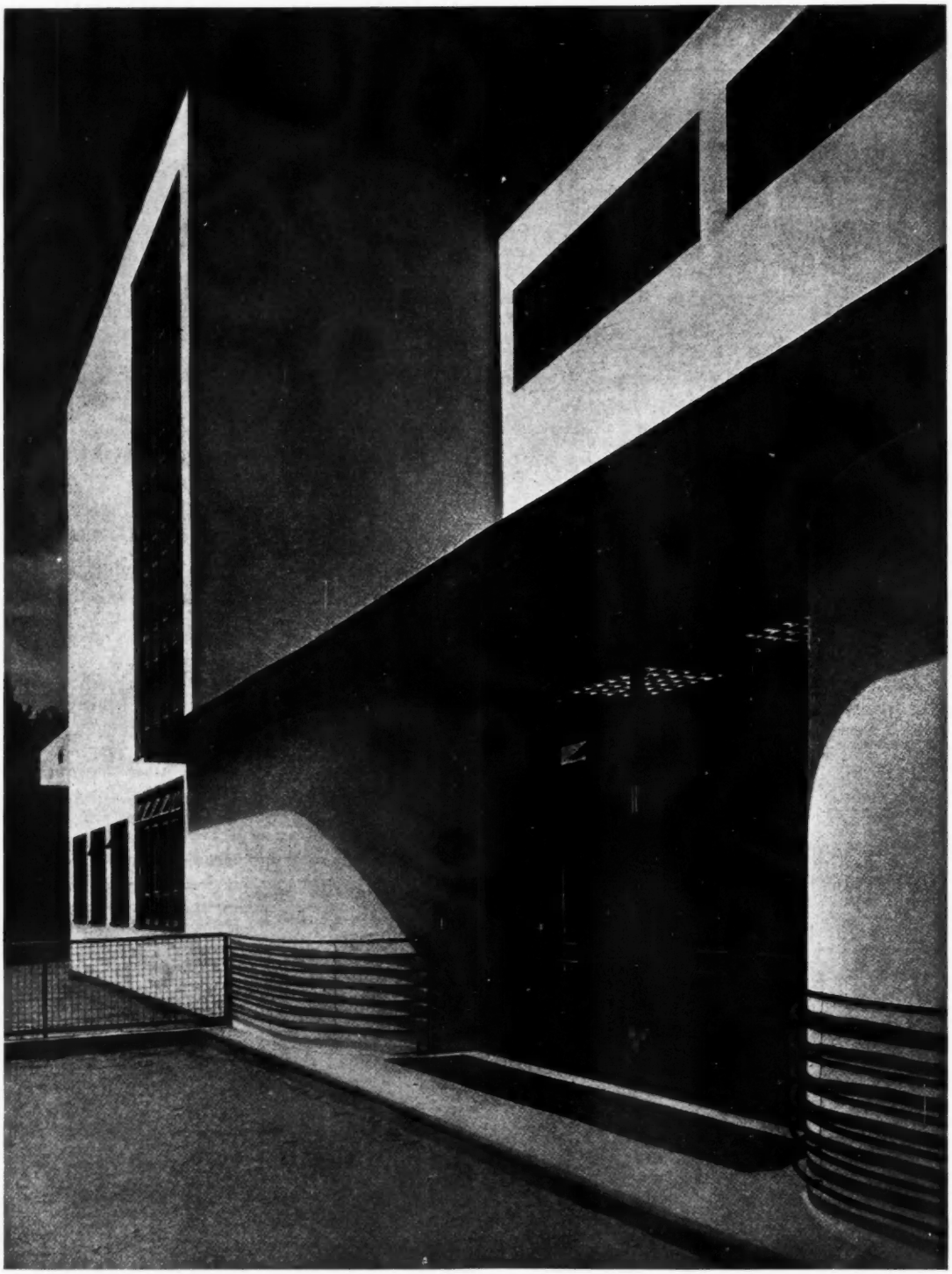
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. 12 noon. "Architecture." By L. O. Faraker. 3 p.m. **12 noon.**

FRIDAY, OCTOBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chinese Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

WEDNESDAY, OCTOBER 30

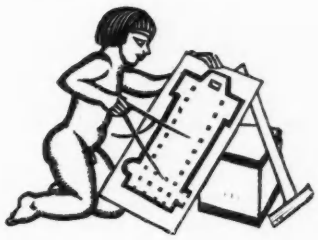
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**



GEOMETRY WITHOUT YAWNS

This national school at Celle, in Germany, is a pertinent modern example of large, plain surfaces, devoid of any ornamental enrichment, achieving the dignity of imposing proportions. The fenestration, in part vertical and in part horizontal, is bold and logical. Herr Haesler has made skilful use of prisms for overhead lighting throughout. Two small concrete and glass-block skylights of this type can be seen under the soffit of the wide slab which serves as porch or marquise. A deft yet human touch is the neat and decorative placing of the plain iron guard-rails round the curved entrance piers so as to prevent the white roughcast rendering being discoloured by Hans and Gretchen's occasionally sticky or inky little fingers. Plans of the school are reproduced on page 356.

THE ARCHITECTS' JOURNAL



WEDNESDAY, SEPTEMBER 4, 1929

WESTMINSTER ABBEY: THE NATIONAL MONUMENT

> " . . . In this Act the expression 'monument' includes any structure or erection, *other than an ecclesiastical building which is for the time being used for ecclesiastical purposes* . . ."
>
> —Part IV, section 22 of *The Ancient Monuments Consolidation and Amendment Act, 1913.*

THE first Ancient Monuments Bill was passed by the Commons in 1873, but it was rejected by the Lords. A modified version became an Act in 1882, was strengthened ten years later, and was finally superseded by *The Ancient Monuments Consolidation and Amendment Act, 1913*, which is the present and only Act relative to ancient monuments.

That was sixteen years ago, and in the interval the national attitude towards ancient monuments of historical and architectural interest has undergone a vast change. The Society for the Protection of Ancient Buildings—the pioneer movement in this direction—has alone doubled its membership during the same period, and a number of new societies with kindred aims have been formed since the conclusion of the Great War. It is symptomatic of increased knowledge and a wider appreciation of fine architecture that the most recent of these is the Society for the Protection of Westminster Abbey, an enthusiastic and growing organization which is the direct outcome of the concern aroused by the prospect of the Abbey's defacement by the proposed building of a sacristy.

Only two months ago, at the annual meeting of the S.P.A.B., Sir Arnold Wilson, in his admirably constructive and thoughtful address, pointed out that " . . . We are striving to maintain for public enjoyment and for posterity the beauties of England that we have inherited from our ancestors, without the necessary legal or administrative machinery to enable us to do so, and without adequate recourse either to the public purse or to Government intervention. . . ." Public opinion is, in fact, considerably in advance of legislation, and the time is ripe, and the occasion appropriate, for the exceptionally democratic Government now in office to reconsider the exemption of ecclesiastical buildings from the operation of the 1913 Act, as quoted at the head of this article.

The case of Westminster Abbey, where the Dean is all-powerful and answerable to no one but himself, has emphasized the need for amplification of the powers under the Act. It is an absurd anachronism that adequate control should be denied the one building that matters most in this country and, indeed, in the British Empire.

It is probably not generally realized that the law, as it stands at present, only gives power to constitute Commissioners of Works guardians of unoccupied buildings and ruins, whilst all our great cathedrals and ancient civil buildings are excluded from any outside supervision whatever.

It is just possible, of course—but improbable—that the Church will perceive the risk it is running of compulsory external supervision by the volume of adverse criticism provoked by the danger now threatening the Abbey, and that it will, in consequence, devise some kind of internal machinery of its own—perhaps on similar lines to diocesan advisory committees—for the proper safeguarding of all cathedrals and abbeys so that the very great responsibility for the care of these national possessions, now shouldered in each case by the Dean, shall in future be shared by competent technical advisers with the power to veto needless additions or acts of vandalism.

The only alternative would be to delete the existing exemption of ecclesiastical buildings from the Act and include those of them which come within the Act's definition of " ancient monument." This applies to " . . . . any monument or part or remains of a monument, the preservation of which is a matter of public interest by reason of the historic, architectural, traditional, artistic, or archæological interest attaching thereto . . . " etc. The Abbey assuredly has all the necessary qualifications.

It is a curious fact, worth mentioning, that the Chapter House of Westminster Abbey comes under the jurisdiction and care of His Majesty's Office of Works, the reason being that the Chapter House was long ago our ancient Parliament House and has never been restored to the Abbey. On account of its national importance Westminster Abbey should be treated as an exceptional case and forthwith be put permanently under the protection of the Commissioners of Works through their Ancient Monuments Board constituted under the 1913 Act.

NEWS & TOPICS

THE NEW PALACE OF THE LEAGUE OF NATIONS

THE present session of the League of Nations, which opened at Geneva on Monday, will be memorable in an architectural sense for the ceremonious laying of the foundation-stone of that unprecedented masterpiece of collective planning and cosmopolitan composition, the new Palace of the League. With charming *naiveté*, the lay Committee of Selection which was appointed to cut the Gordian knot of international rivalries in 1927 have declared that they consider " the plans, as now revised, not only fulfil the required conditions from the practical point of view, but are also harmonious in their architectural and artistic features (the distinction is a curiously official one), and will worthily express the significance of the League." It will be remembered that the present design—to which the League Council gave final approval during its last meeting in Madrid—is a composite one in which MM. Nénot, Flegenheimer, Broggi, Lefevre, and Vago have collaborated: an architectural consortium containing two French representatives, and one each from Switzerland, Italy, and Hungary.

*

The new buildings, I am told, will cost about £1,000,000; the original sum of £680,000 voted in 1924, subsequently raised to £780,000 in 1927, having been increased by a generous gift of £400,000 from Mr. John D. Rockefeller, junr., to defray the cost of erecting and endowing an international library. In extent they will roughly cover the area of the Palace of Versailles (*absit omen !*), the total length of the main front being nearly 1,200 ft. The new site in Ariana Park lies on high, wooded ground outside the town between the escarpment of the Jura Mountains and the shore of the lake, and overlooks the main Geneva-Lausanne road. The buildings will consist of three blocks. In the middle will be the circular assembly hall, which has a diameter of some 170 ft., with ornamental terraces laid out in front of it. To the right will be the library, with a frontage of approximately 195 ft. On the left the council chamber, with its various committee rooms, will occupy a whole floor of the secretariat block, which has a principal façade 585 ft. in length that stretches in front of the existing Ariana Museum. Both these dependent wings are advanced from the assembly hall, and built on a lower level to it, owing to the downward slope of the ground. As the working drawings have not yet been got out, and tenders cannot be invited until they are, it is not expected that the secretariat will be able to move from its existing premises in a former hotel, or that the assembly and council meetings can abandon the use of the so appropriately named Salle de la Réformation for another four or five years. The acoustics of the latter are notoriously bad, and it was with a view to securing perfect audibility in the new assembly and council halls that our own Department of Scientific and Industrial Research has been engaged in carrying out experiments at the cost of the British Government ever since the League first decided to build a home of its own in 1924.

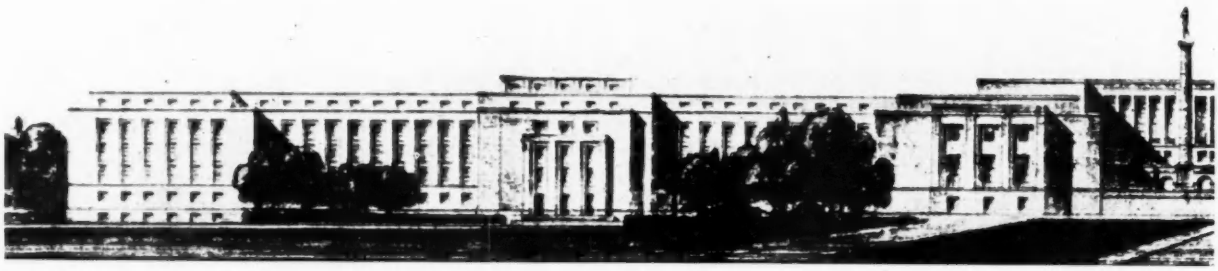
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THE SACRISTY CONTROVERSY

Last week brought the Editor a fresh crop of correspondence from eminent architects on the second great (1928-29) Abbey sacristy controversy. Mr. Goodhart-Rendel's amusing letter provides arguments both for and against the Tapper annexe. As an architect, he holds—*pro Diacono*—that " such designs as that of the north side of the Abbey gain more than they lose by low accretions." Further, as an Englishman, he considers " the present century ought to welcome any reasonable opportunity of contributing "—" in the natural manner of today, subordinate to the old, and not a reproduction of any past style," as the general recommendations of the S.P.A.B. express it—" visibly and characteristically, toward the completion of a building to which each of six preceding centuries has visibly and characteristically contributed."

*

In this connection, Mr. Walter H. Godfrey reminds us that the Dean's proposal was objected to by the Councils of the Society of Antiquaries and the London Society, " not only because it obscured the most valuable part of the Abbey and crowded out St. Margaret's Church, *but because it clearly precluded the architect from adding anything worthy of the Abbey itself.*" Pleading in turn for the opposition, Mr. Goodhart-Rendel challenges the grounds on which the Dean has declared St. Faith's Chapel " irreplaceable for private prayers," and takes the opportunity of censuring " a regrettable national habit of praying in corners, and giving the rest of a cathedral over to other purposes, too deeply rooted to be disregarded." Even if



The final design for the League of Nations building to be erected in the Parc Ariana, on the Jura side of the Lausanne road, overlooking the lake and facing Mont Blanc. The original site was abandoned as there was not room for the library (seen on the right),

St. Faith's Chapel is to be made a "thoroughfare," he asks, are there not many other "corners" of the Abbey in which private devotions would be untroubled by passers-by?

*

In Mr. Morley Horder's opinion—and his rebuke is well merited—if only the Press had led educated opinion from the outset of the controversy—this ill-starred scheme would long ago have been nipped in the bud. Indeed, he is inclined to doubt if a sacristy is necessary at all, and inquires ironically whether "religious fervour has increased so remarkably since the days of Dean Stanley." One wonders what the comment of Eric, the earnest young hero of *Little by Little*, would have been on this unblushing levity over something which, if true, would be nothing short of a boundless national calamity! Mr. Nathaniel Lloyd points out very pertinently that a sacristy is really no more than "a wardrobe and dressing-room"; and suggests, like Mr. Leslie Mansfield, that if these are really needed, accommodation for them could be built underground—possibly under the turf of the site recently occupied by Mr. Tapper's model. Mr. Alfred C. Bossom, telegraphing from the South of France, asks bluntly how, when "nationally recognized authorities" exist to adjudicate in such matters, "we dare to allow less-informed persons" to decide them. Thus, in spite of Mr. Goodhart-Rendel's hazardous contention, in his rôle of "a practical man," that the sacristy ought to be put "where the clergy find it most convenient," the Noes (i.e. those whose opposition the Dean declares he cannot take seriously) continue to have it.

*

PREPARATION OF TOWN PLANNING SCHEMES

The Garden Cities and Town Planning Association have produced one of those admirable little booklets that look like pamphlets yet contain information that could quite easily be swelled to the dimensions of a book. *The Preparation of Town Planning Schemes*, by Mr. Alfred T. Pike, the secretary of the association, is a handbook for everyone connected with town planning, either as a member of a town-planning authority, an official, or even as a member of the interested lay public. The work is a digest of the Town Planning Acts, and as such has had its predecessors—handy guides to a difficult subject. None that I have read so far has arranged their matter in clear enough sequence to become what this booklet is likely to become, a desk-side reference. First, the history of a town-planning scheme is stated boldly in a stage-by-stage procedure, each stage related to its order or rule. Then comes a fuller explanation of its working in practice: how the preliminary statement is prepared, how objections are received; how it is possible to turn the edge of objection by co-operation. Examples of what has been done under approved preliminary statements by various towns are a valuable inclusion.

*

The financial aspect of town planning, the cost of making a map, and the question of compensation, which must loom as a bogey to small towns faced with the necessity of preparing a plan within the next few years, are dealt with in a clearly written chapter that should help to dispel doubt. It should be realized that the Act makes it compulsory for all towns with more than 20,000 population to prepare a scheme before 1934, though actually the smaller town has made a better response, realizing that motor traffic and the wider scope of speculation lay it open to greater danger. Also, alas! the small country town has more to lose. Anything that helps to oil the wheels of a cumbersome machine is to be welcomed. This work is first-rate lubrication, and cheap at sixpence a copy.

*

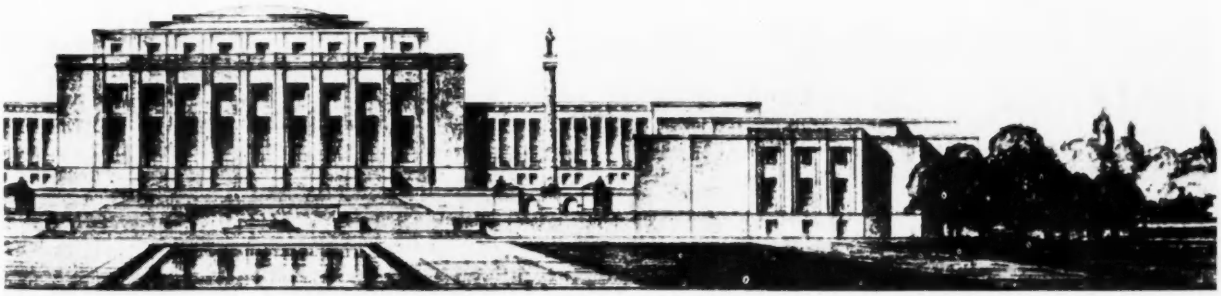
BROOK-GREAVES'S DRAWING OF ST. PAUL'S

A correspondent has sent me a question regarding the Brook-Greaves's drawing of St. Paul's—the edition de luxe of which, I understand, went out of print a little while ago. He wants to know what is the nearest approach to such a drawing in the past. The original drawing by Mr. Brook-Greaves is 12 ft. by 8 ft., or four times the length and breadth of the collotype reproduction. I am afraid I know of nothing on this scale, and the most complete drawings I can remember are, I think, straightforward sections. Does any reader know of an isometric which tries to show anything like as much as the St. Paul's drawing shows? My list, which I must not divulge just now, is a very short one.

ASTRAGAL

THE HONEYWOOD FILE

The Editor is much pleased to announce that Karshish has recovered from his illness, and that he will resume his article on "The Honeywood File" in our next issue.



since presented by Mr. John D. Rockefeller, junr. The foundation stone will be laid during the Tenth Assembly of the League, which opened at Geneva on Monday last. It will be four or five years before the new building will be ready for occupation.



BRANCH FOR

DESIGNED BY

Lloyds Branch Bank, Muswell Hill. The north-east front, and the architect's drawing of the north-west elevation. The building is of brick with a tiled roof and steel framed windows.



IN designing the branch banks illustrated on this and the following pages, the architect has paid special attention to the surrounding buildings in the different localities in which they have been erected. They are typical of the buildings which Lloyds Bank Ltd. are erecting in and around London.

That at Muswell Hill stands on an open site. It is of brick, with a tiled roof and steel-framed windows. A shop has been incorporated in the design, and will eventually be taken in as part of the bank. At the rear of the banking hall are the manager's room, waiting-room, and lavatory accommodation. On the first floor are two flats.

The Lambeth branch is in Lambeth Walk, a shopping centre. It was converted from shop premises. The façade is of concrete. The plan is particularly interesting owing to the narrow street frontage and the extreme depth of the building, which runs back to Seldon Mews. On the second and third floors, immediately above the banking hall, are the caretaker's living-room and bedroom, and a store. Farther back, and above the manager's room, is a kitchen.

The branch at Putney has a similar

BANKS
LLOYDS

EDWARD MAUFE



Lloyds Branch Bank, Muswell Hill. A view from the Broadway (north-east and north west elevations). The architect's drawing of the north-east elevation is reproduced below.

façade to that at Lambeth. It stands in the High Street on a narrow site.

The architect has surmounted difficulties of lighting by placing on the façade a large window with coupled pilasters, in the centre of which is designed the entrance door.

The deep banking hall has been taken up to the second floor, and has been provided with a gallery. On the second floor are the stationery-room and lavatory accommodation.

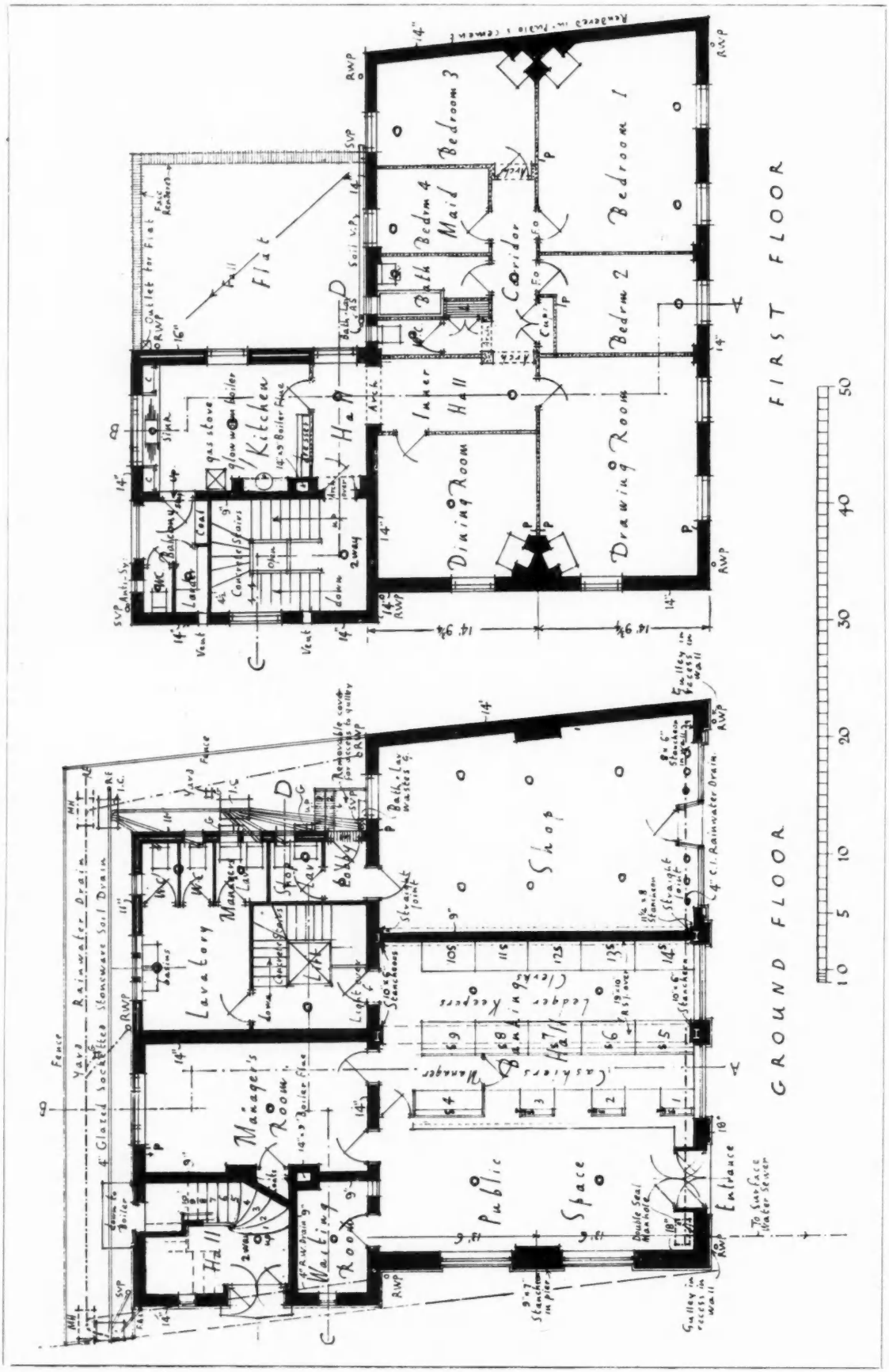
The bank at Dartford stands on a curved corner site formed by the new Dartford road widening scheme. By the judicious use of two breakbacks in the walls and a series of canted faces the architect has successfully accomplished the design of a pleasing building in brick. The tall, semi-circular headed, wood-framed windows are notable. Separating the ground and upper storey is a long stone band bearing the name of Lloyds.

The two shops in the Market Street have been so designed as to allow for future extensions to the bank.

The first floor is devoted to offices.

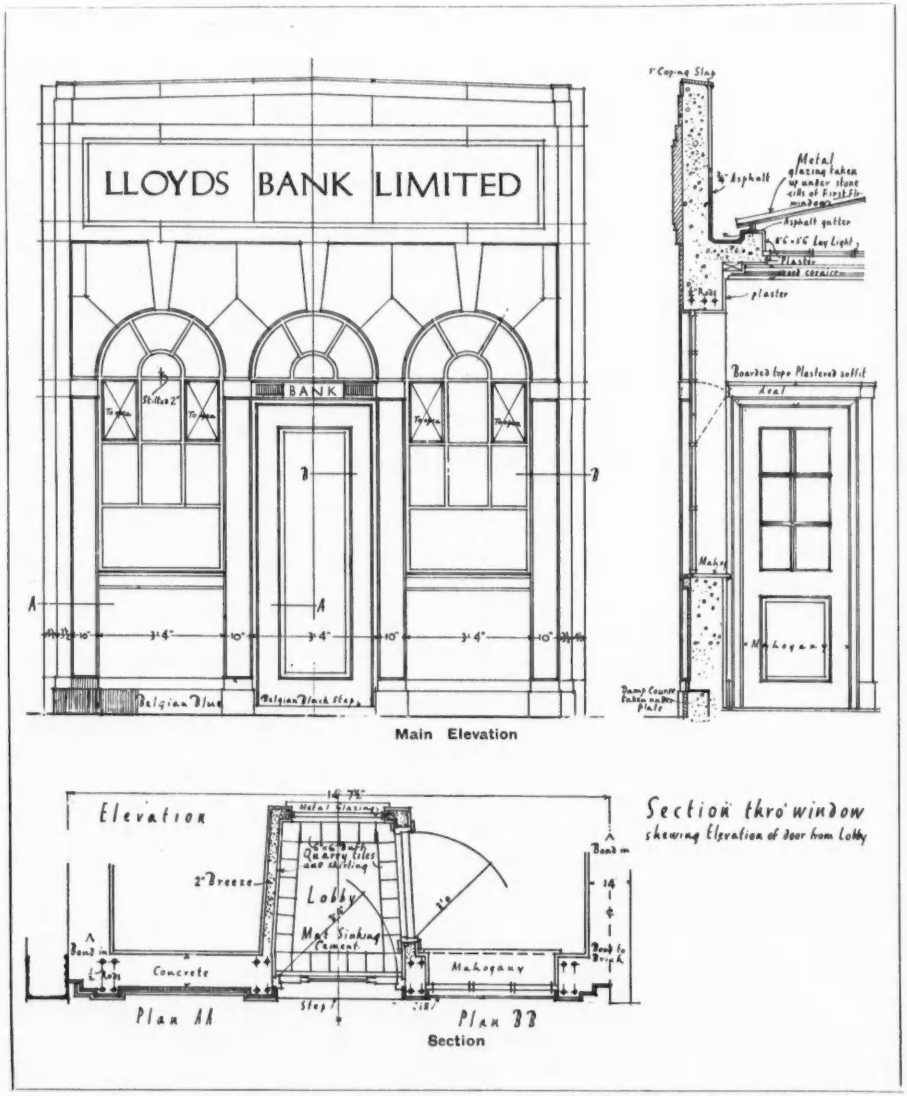
The entablatures over the entrances to each of the banks are executed in stone.

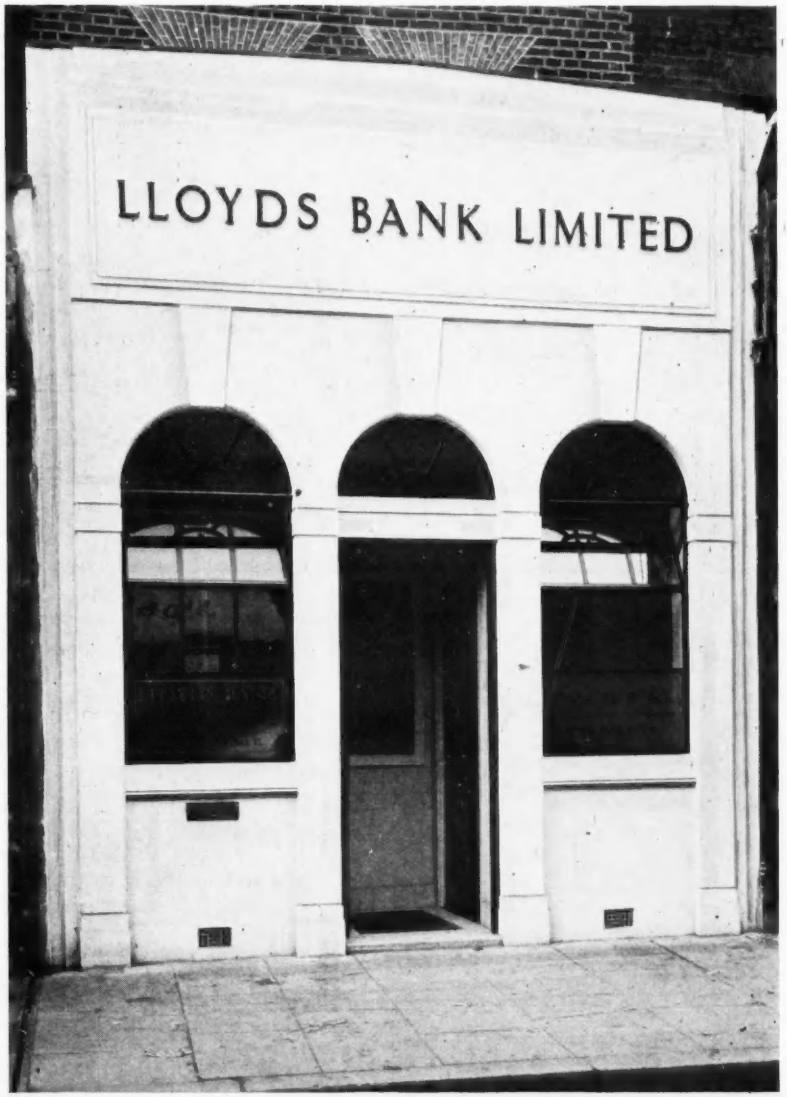




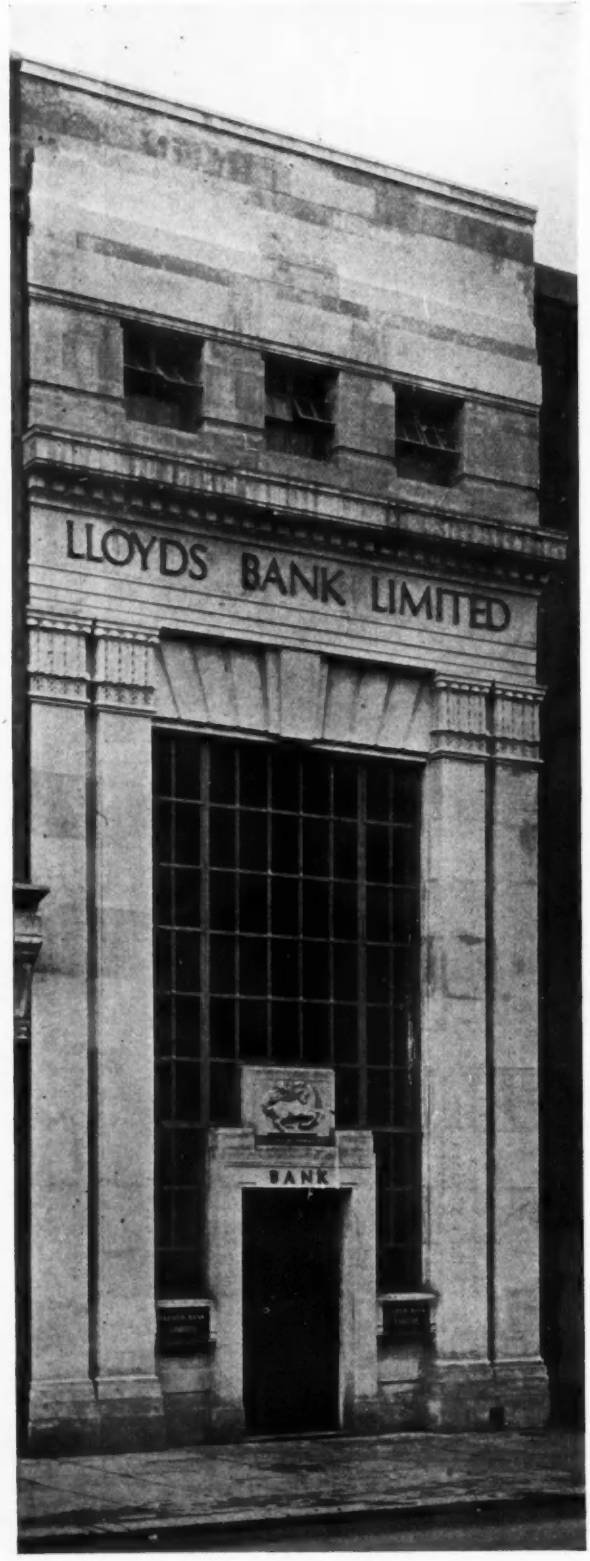
Lloyds Branch Bank, Muswell Hill. By Edward Maufe. Ground- and first-floor plans. The building stands on an open site. The shop, incorporated in the design, will, when the necessity arises, be converted to the uses of the bank. On the first and second floors are two self-contained flats.

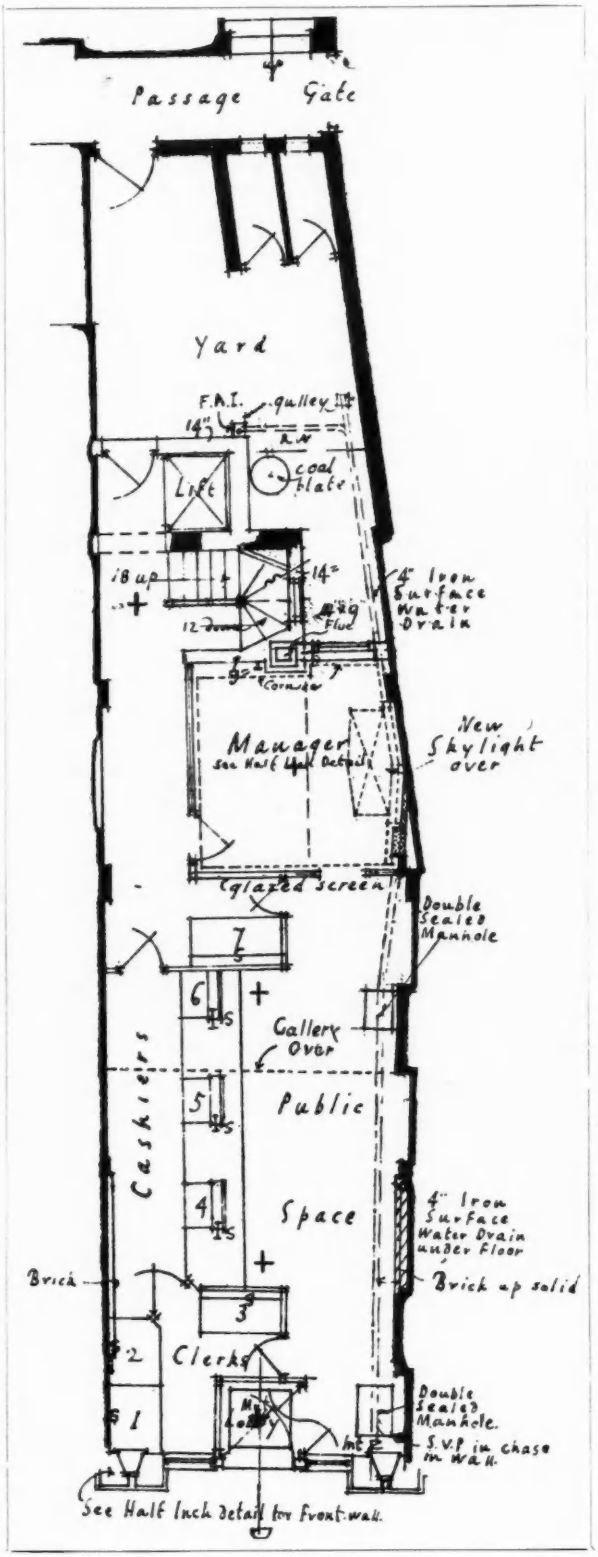
when the necessity arises, be converted to the uses of the bank. On the first and second floors are two self-contained flats.





Lloyds Bank, Lambeth. By Edward Maufe. The architect's working drawings and a photograph of the exterior. The bank is a conversion from a shop and has a concrete front. It runs back the whole depth of the site to Seldon Mews. On the first floor is a small flat for the use of the caretaker.



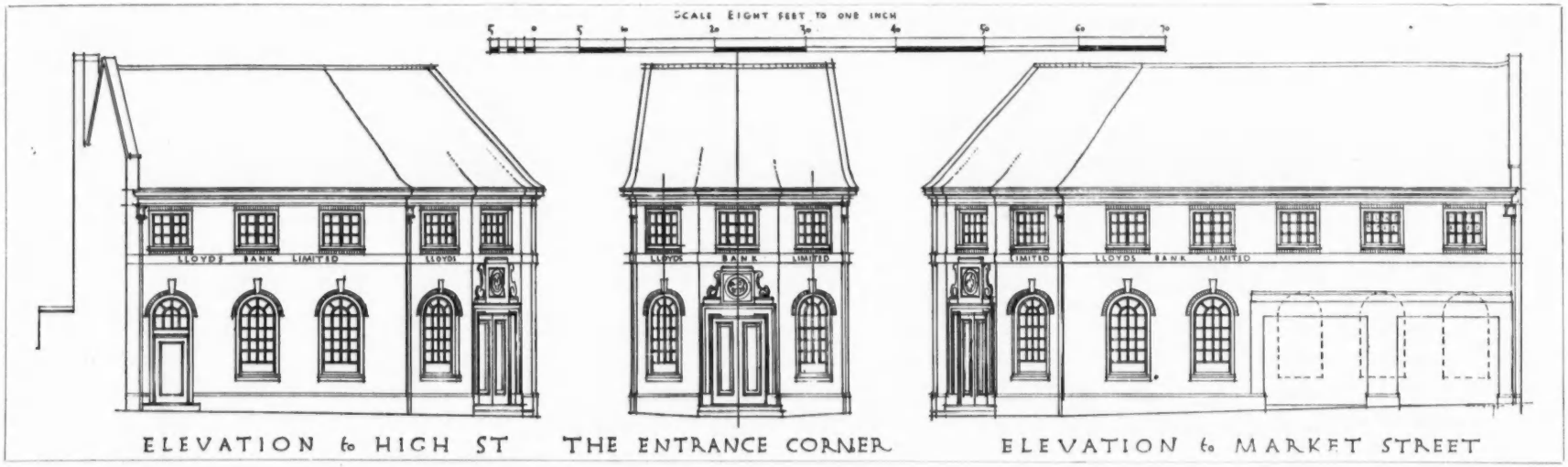


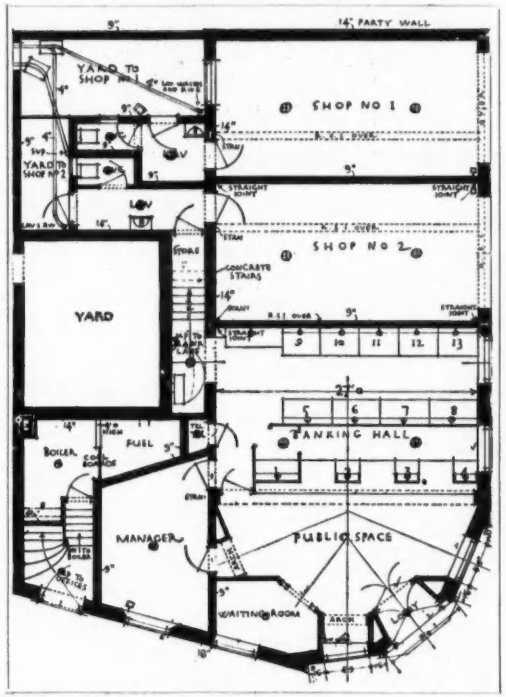
Lloyds Branch Bank, Putney. By Edward Maufe. Standing in the High Street, this bank has an exceedingly narrow street frontage, and is a conversion from shop premises. The façade is of Portland stone, with steel-framed windows.



Lloyds Branch Bank, Putney. By Edward Maufe. Interior of banking hall showing gallery. By taking the hall up to the second floor the maximum amount of light was obtained.

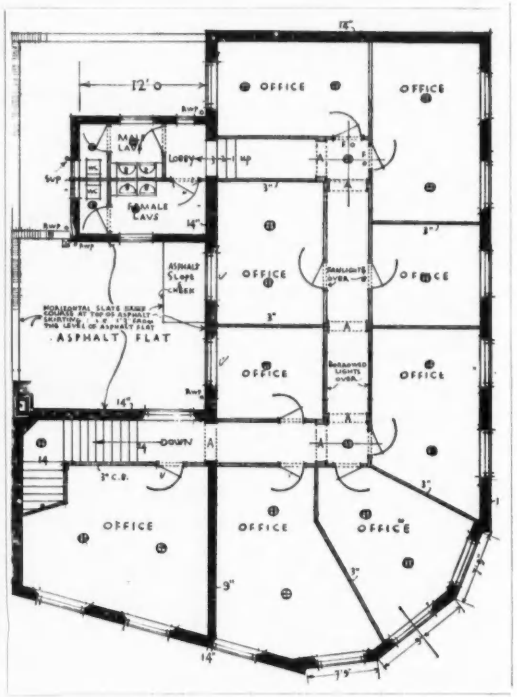
Professor C. H. Reilly makes special reference to the Putney branch in the current issue of the *Banker*. He says: It shows a modern clean-cut interior with the very minimum of ornament to give expression. Here, the architect was cramped for floor space, and has apparently had to put some of the clerks in an upstairs gallery. He has therefore very wisely emphasized this gallery, making it a strong feature in his interior. To do this without worrying the small space at his disposal he has left its front solid without a balustrade, but has emphasized it with a few sharply-drawn lines which echo well with the cornice lines and other sharp drawing of his interior. It will be seen that to give a formal effect to the end of the hall, where the manager's room is, he has, as it were, adumbrated an Order, and a Corinthian one at that. Another point in this interior is the plain floor outlined only in some dark material. Suppose this floor had been covered with black-and-white squares, this little interior with its grace and daintiness, as well as its simplicity and strength, would have been ruined.

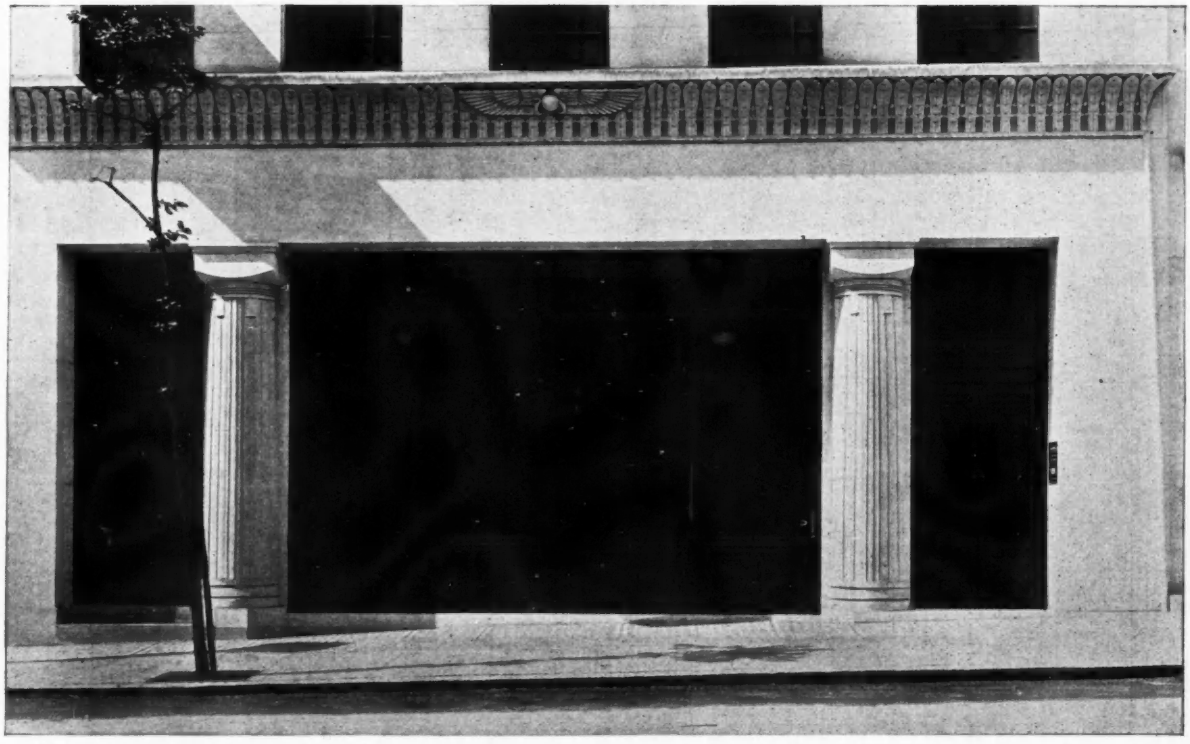






Lloyds Branch Bank, Dartford. By Edward Maufe. Plans and elevations; and a photograph of the exterior.





This photograph of the shop-front should be compared with the general view of the building on page 347. The wide architrave and sturdy columns have been specially designed to form a contrast with the long, slender piers on the upper portion of the façade.

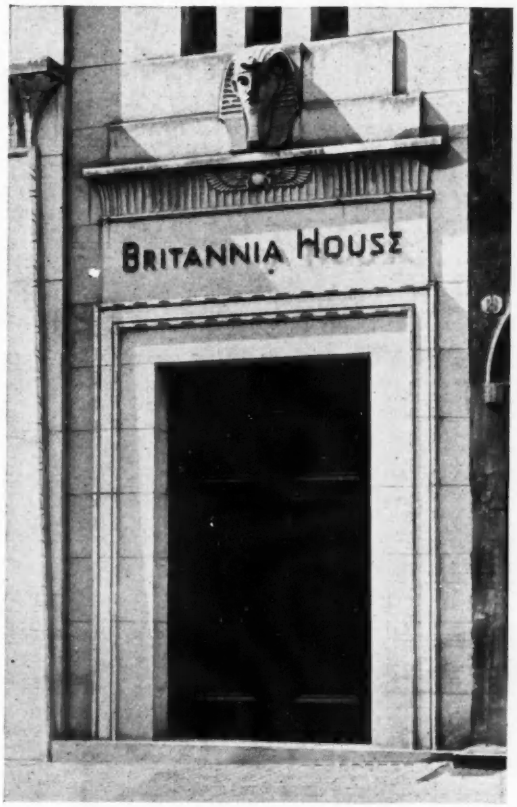
BRITANNIA HOUSE, W.C.

DESIGNED BY HOBDEN AND PORRI

The site of Britannia House, 231 and 233 ShaftesburyAvenue, was previously occupied by the Westminster French Protestant Church and School. The church, which occupied the southern portion of the site, was built during the Gothic revival of the last century, and on the northern portion of the site was a small schoolhouse with a yard at the rear, over which the adjoining property has rights of light.

These rights of light and air affected the general planning of the building, and made it necessary to form a long sloping roof through the second, third, and fourth floors of the rear portion of the building.

The street front has a strong vertical treatment, which was considered most suitable for this narrow site. The relatively low shop-front opening, with its wide architrave and sturdy columns, has been designed by the architects to form a contrast with the long, slender piers above, and to give a sense of strength and scale to the whole building.

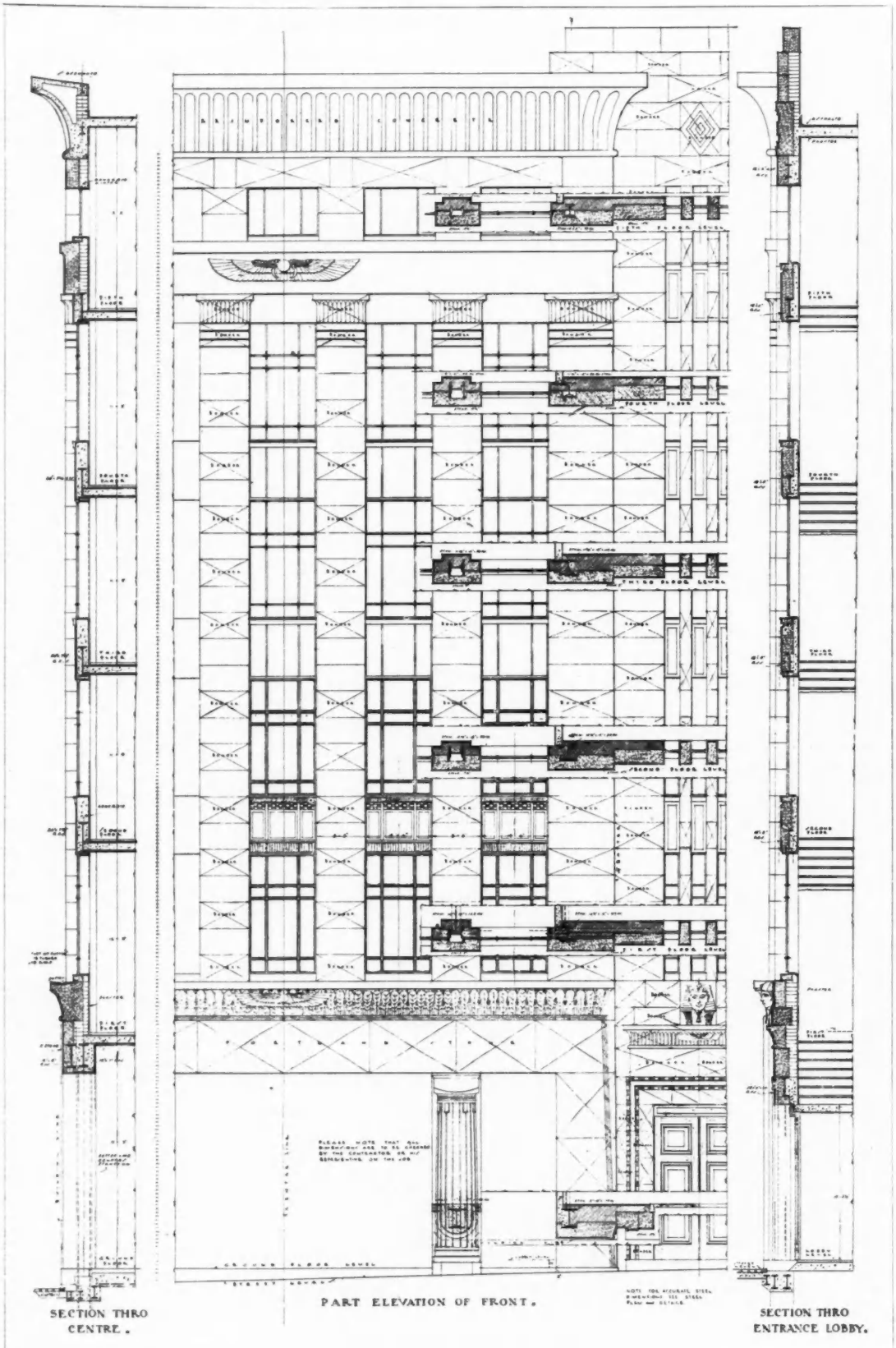


The entrance is on the right-hand side of the shop-front.

The vertical treatment is terminated by a powerful cornice and frieze into which the piers are blended by channels below the carved capitals.

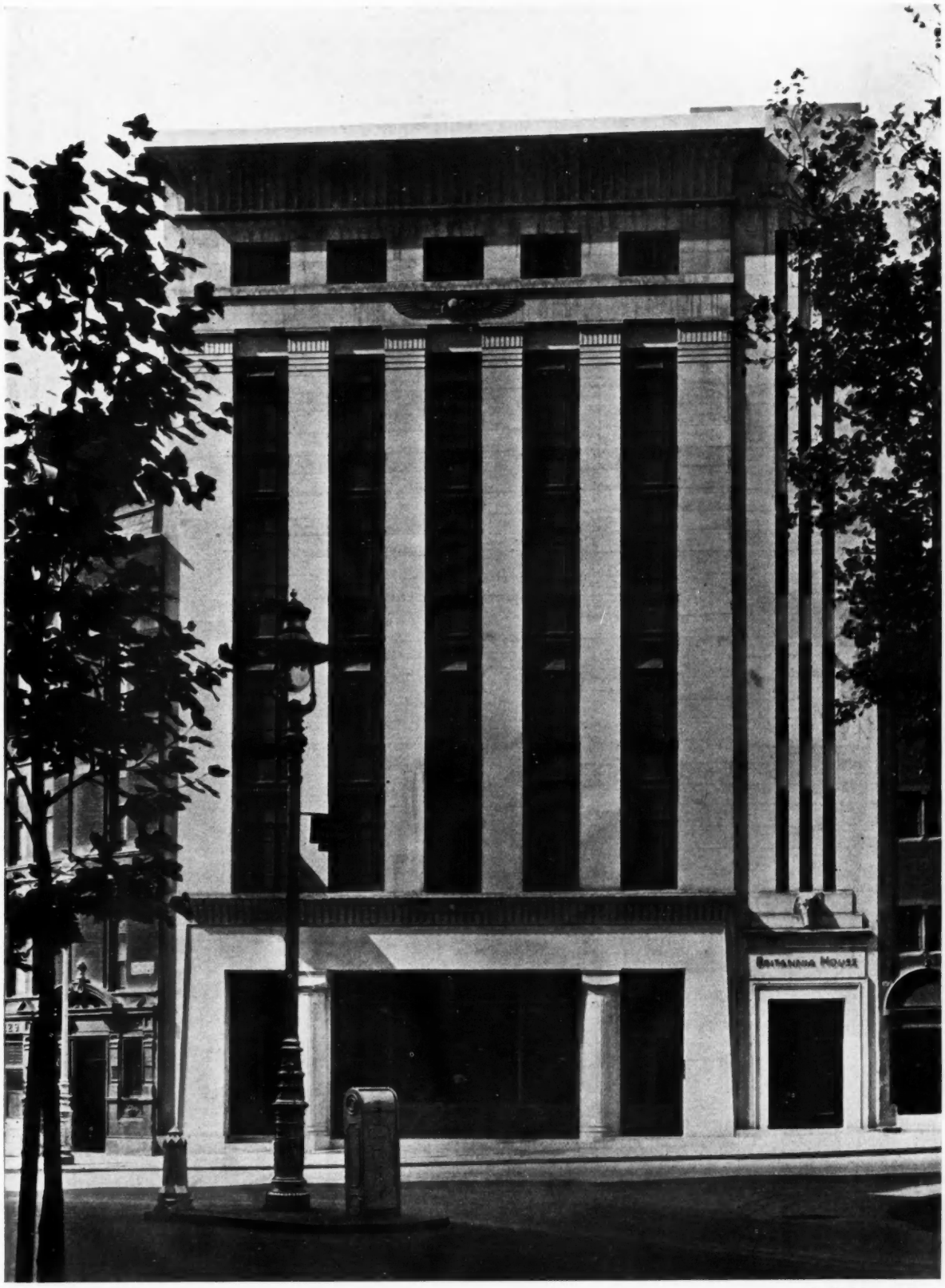
A sense of strength and repose is given to the whole front by the well-placed strong horizontal lines. Added interest is obtained by the judicious use of Egyptian motifs; the carving of which received very careful consideration in order to obtain a proper balance of light and shade.

Internally the floors have been left open for division as required, but the lift-cage and enclosure have been designed by the architects to harmonize with the general treatment. The entrance hall and lower portion of the staircase are lined with Roman stone panels with black marble capping and stiles.



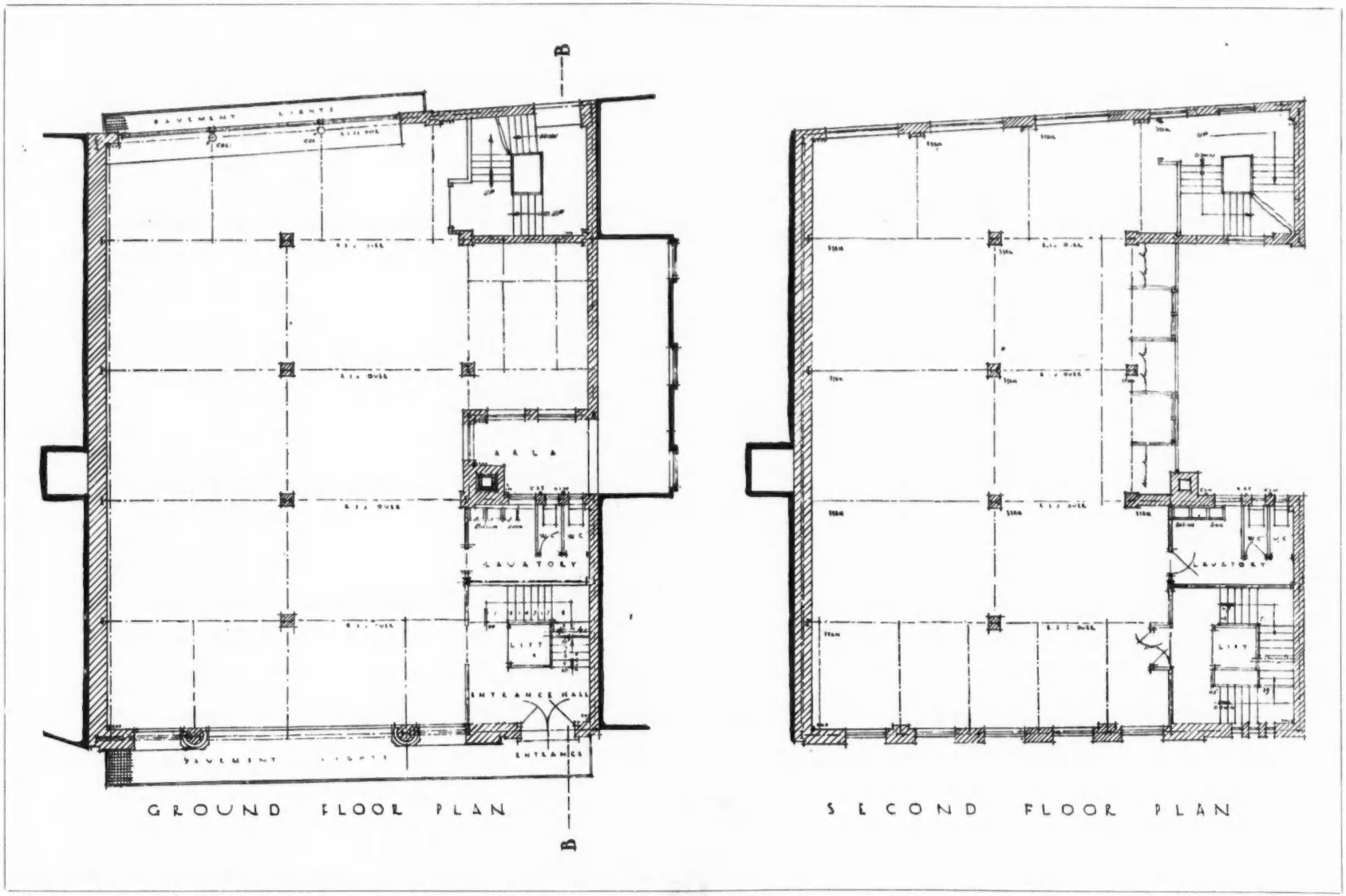
Britannia House, W.C.] [*By Hobden and Porri.*

The architects' drawing of part of the front elevation. The top cornice is of reinforced concrete, finished in artificial stone to match the Portland stone with which the façade is faced.



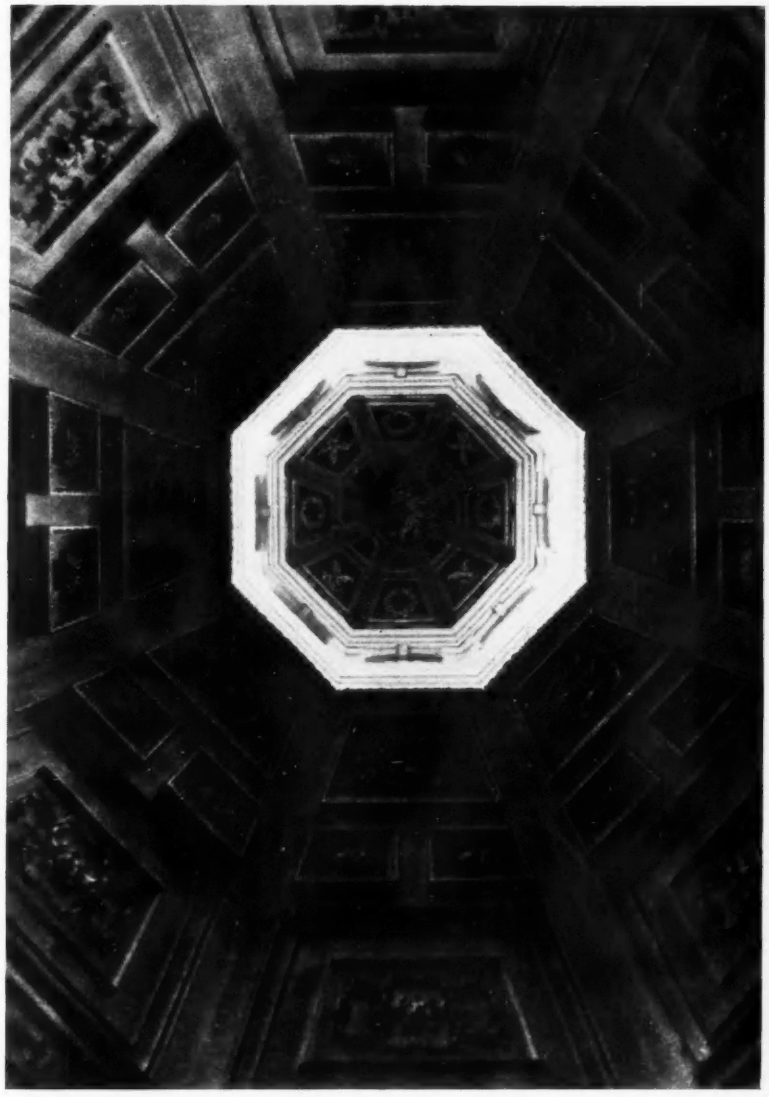
Britannia House, W.C.] *[By Hobden and Porri.*

The strong vertical treatment of the building is terminated by a powerful cornice and frieze into which the piers are blended by channels below the carved capitals.



Britannia House, W.C.] [*By Hobden and Porri.*

The ground- and second-floor plans. Internally all the floors have been left open for division as required. The entrance hall and lower portion of the staircase are lined with Roman stone panels, with black marble capping and stiles. Rights of light and air affected the general planning, and made it necessary to form a long sloping roof through the second, third, and fourth floors of the rear portion of the building.



ENGLISH PRECEDENT No. 80

CEILING OF ANTECHAPEL, CLARE COLLEGE, CAMBRIDGE

The antechapel is an example of the best work of Cambridge's amateur architects, Sir James Burrough and James Essex.

A small octagonal chamber, connecting the inner court of the college and the chapel, it possesses a fine domed ceiling with ornamented coffering. The dome is surmounted by a tall lantern, which is the sole source of light. The whole effect is one of most pleasing lightness and originality.

Unhappily, the chapel itself is not noteworthy, save for the altar piece by Cipriani, and does not carry on the elegance of the antechapel.—[ROLF HELLBERG.]

third, and fourth floors of the rear portion of the building.

THE ABBEY SACRISTY

We publish hereunder a further selection of letters setting forth views of prominent architects as to the Dean's proposals for building a sacristy as an annexe to Westminster Abbey, elicited by the article on the subject printed in our issue for August 21.

BUILD IN THE ANGLE BETWEEN NORTH TRANSEPT AND NAVE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The whole attitude of the cognoscenti appears to me to be wrong.

If a sacristy is needed it ought to be built, and built as magnificently as possible—and not in any tame imitation of old work, nor should it be hidden out of sight.

Without either immodest presumption or pusillanimous self-depreciation, this could be done; and if the building were placed in the angle between north transept and nave—detached, of course—it could be an added glory and an improvement to the Abbey.

Are we to be nothing but admirers of the past and collectors of "period pieces," or are we to live beautifully ourselves?

An indiscriminating worship of the past, combined with a total blindness to the spiritual values, whether artistic or other, of our own day, is merely a sign of lack of vitality, faith, and virtue, and is to be deplored rather than encouraged.

W. B. HOPKINS

PRESERVE AN OLD BUILDING BY USING IT

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I have read the article in THE ARCHITECTS' JOURNAL on "The Abbey Sacristy reconsidered." The Editor has brought together the opinions of those who are opposed to the addition of a new building on the north side of the abbey very ably. The conclusion he draws seems inevitable. The idea that additions must not be made to an ancient building is one with which I cannot agree, because probably the best way to preserve such a building is to use it. Occasionally additions become necessary, and if made in such a way as not to destroy the character of the building, or its historical interest, I can see no objection, provided the work does not copy that of the past.

But Westminster Abbey is unique, and I certainly think it would be a mistake to add to it on the north side, a mistake which I think future generations would find it as hard to forgive, as we find it difficult to forgive the mistakes made by our fathers. Every churchman, including myself, appreciates the efforts of the Dean and Chapter to make Westminster Abbey a live centre of Christian worship with all the dignity and beauty possible, and for this a sacristy is badly needed.

Mr. Tapper is an excellent architect and a practical man, and there can be no doubt that he can find an alternative which will provide the necessary convenience.

There is, however, one authority who stands above all others in regard to Westminster Abbey, who, I believe, knows every stone of that great building, without whose approval nothing of a structural nature ought to be done—Mr. W. R. Lethaby. If the Dean and Chapter would instruct Mr. Tapper to confer with him the problem could undoubtedly be solved, difficult as it appears to be. The result should satisfy the needs of the Dean and Chapter, and it would satisfy those of us who are anxious to prevent a grievous mistake from being made.

CHARLES SPOONER

THE ABBEY A "LIVE" BUILDING

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—When an addition to an old—or, may we say, a good or beautiful?—building is involved, an architect possessed with a due sense of what is fitting is placed in a position of delicacy. For, to fulfil, conscientiously and justly, a perfectly reasonable and accepted practical need, he may have to risk a charge of vandalism—while if, out of regard for a condition of age or æsthetic distinction, he compromises on the practical or convenience issue he will have partially failed in his most obvious duty: one that those of his profession are specifically charged to fulfil.

In our present case the Abbey is, without question, a "live" building, filling a great place in national life, and its essential functions are religious and ceremonial. It seems to be accepted that an effective sacristy is a necessity. But, we are told, the circumstances at Westminster are so exceptional that on no account must an addition, even to meet a most pressing practical need, be made to it—that our normally accepted standards of judgment must be set aside—that we must fall back on evasions, burrow in the ground, lop off part of a school, seize a Chapter House or Chapel, go west rather than east, south rather than north, and so on—anything, it would seem, rather than face a quite serious problem of necessity on its merits, as we are taught to do in the other affairs of life.

But, in the hierarchy of values, is not the effective fulfilment of use in a building conceivably of more importance than a slight disturbance of external form? And what answer to this would the logic of John Ruskin have driven him to give?

As to the reasonableness or acceptability of the—shall we say, makeshift?—proposals, I have no competence at all to judge. Yet I have no doubt that they were seriously considered by those qualified to do so. May we not, indeed, be quite excusably doubtful of the wisdom of evasions, and as to whether the cause of ancient buildings will, in the long run, be really served by a policy of denying to them, frankly and naturally, the conveniences necessary for continued and effective use; contrary, it would seem, to the invariable practice of past ages? Yet, like the rest of us, I am well content with the Abbey and other old buildings as they are, and would dislike to move or even hide a single brick or stone of them. But I shall also refuse to subscribe to false theories as to our present-day unworthiness to add to old structures or our incapacity to treat new buildings suitably and beautifully. That represents to me merely an unwarrantable counsel of despair.

Must there, indeed, always be assumed a conflict between past and present?—and is tradition to be regarded as really at an end? May we not rather agree that there is nothing new under the sun, as the passing years continually prove—architecturally and otherwise? And, maintaining a due sense of proportion, of what real importance, actually, are our little differences?—or, for that matter, is a small sacristy?—in the long and widely-varied story of Westminster?

FREDK. R. HIORNS



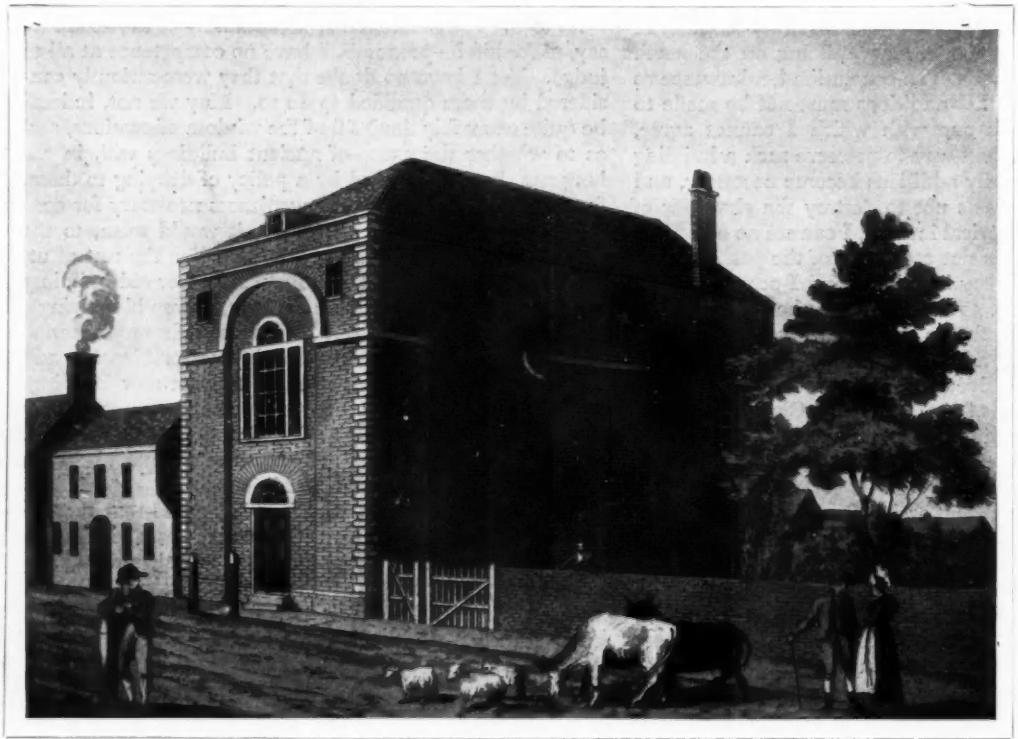
The Theatre Royal, Windsor. (Published February 1, 1805.) Erected in 1794, this theatre remained in use until 1903, in which year it was destroyed by fire. The presen theatre stands on the same site.

PRINTS OF CENTURY

WITH
BY PROFESSOR

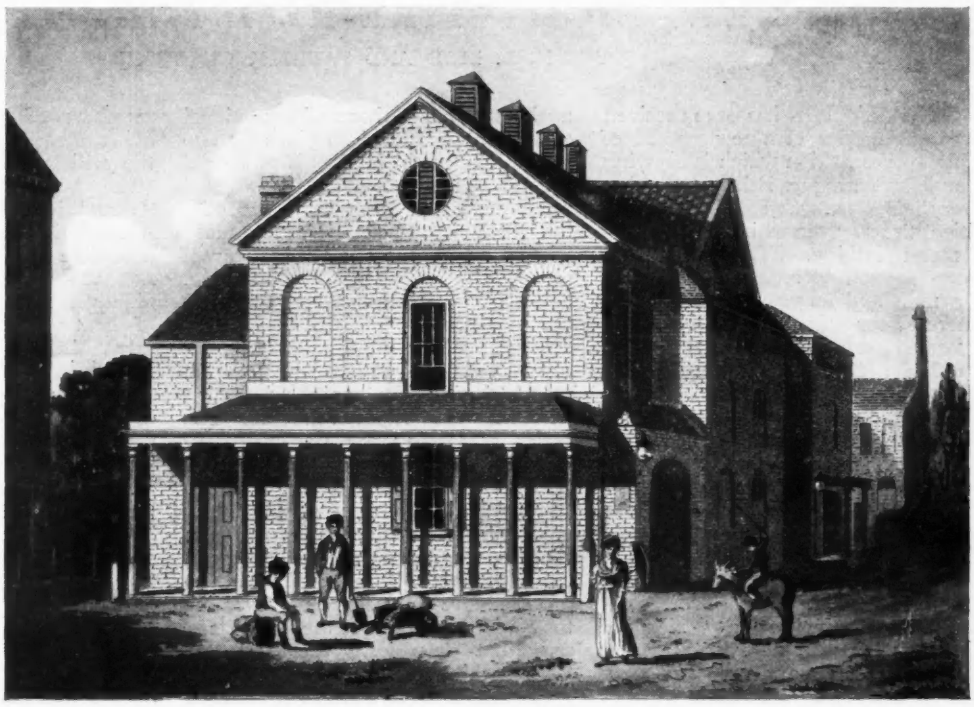
THE ABOVE ILLUSTRATION SHOWS THE CHARMING HOUSE WHICH CONTINUED IN USE FOR MORE THAN A CENTURY. AS A ROYAL THEATRE IT CAME UNDER THE JURISDICTION OF THE LORD CHAMBERLAIN. THE ELEVATION WAS INSPIRED BY THE FRONT OF DRURY LANE. GEORGE III AND QUEEN CHARLOTTE, ATTENDED BY MEMBERS OF THE COURT, WERE CONSTANT PATRONS.

THE PROVINCIAL THEATRES COULD PROVIDE GOOD ENTERTAINMENT ON OCCASION, ESPECIALLY WHEN MRS. SIDDONS AND HER FRIENDS WENT ON TOUR. TRAVELLERS BY STAGE COACH WHO STOPPED FOR THE NIGHT AT GRANTHAM USUALLY MADE A POINT OF ATTENDING THE THEATRE. ONE GENTLEMAN WAS SO DISGUSTED WITH THE BAD ACTING THAT HE MADE A NOTE IN HIS DIARY OF THE WEAKNESS OF THE PLAYERS. FROM THE PRINTS CAN BE GATHERED THE INTERESTING CHARACTER OF THESE EARLY THEATRES.



The Old Theatre at Grantham. (Published February 1, 1805.) Built in 1795, of local brick with stone quoins and dressings. The architect has paid a compliment to the fine façade of the George Inn.

The Theatre at Norwich. (Published April 1, 1805.) Erected in 1797, this theatre had the advantage of standing in open site. Among the notable features of the design are the many exits and entrances.



18th & 19th THEATRES

COMMENTS
A. E. RICHARDSON

OUTWARDLY THERE IS LITTLE DIFFERENCE IN APPEARANCE BETWEEN THE DISSENTING CHAPELS AND PLAYHOUSES OF THE EIGHTEENTH CENTURY. THE ARCHITECT, OR CONTRACTOR, RESPONSIBLE FOR THE DESIGN OF THE NORWICH THEATRE HAD AN EYE FOR THE PICTURESQUE. THE COMPOSITION IS PLEASANT AND EXPRESSIVE. THERE ARE NUMEROUS EXITS AND ENTRANCES AND A SPECIAL PORCH TO THE STAGE ENTRANCE. JUDGING FROM THE LOUVRED VENTILATORS ABOVE THE AUDITORIUM IT IS CLEAR THAT STUFFINESS WAS A NUISANCE TO BE OVERCOME.

FROM THE ILLUSTRATION BELOW IT IS CLEAR THAT THE READING THEATRE WAS PARTLY AN ADDITION TO SOME EXISTING BUILDINGS. THE IMPORTANT FEATURE WAS THE MAIN ENTRANCE, DESIGNED AS AN ENLARGED VERSION OF AN ORDINARY DOORWAY OF THE PERIOD. THE THEATRE BILLED IMPORTANT LONDON PLAYS AND WAS PATRONIZED BY THE LOCAL GENTRY AND TOWNSFOLK.



The Old Theatre Royal, Reading. (Published April 1, 1804.) Built in 1800. This theatre was partly an addition to some existing buildings. The main entrance is designed as an enlarged version of an ordinary doorway.

A NEW LIGHT FIRE-RESISTING FLOOR

[BY ERIC L. BIRD AND PATRICK CUTBUSH]

INFORMATION has been received from America of a new method of floor construction which is enjoying a considerable vogue. Briefly, it consists of very light, open-web, steel joists or light lattice girders over which is stretched a metal lathing. This lathing is strong enough to support the weight of a man and forms a centre for the concrete floor slabs. The ceiling below is formed on a similar metal lathing stretched between the bottom flanges of the joists. The system at first sight seems to possess several "snags," but these are more apparent than real and have mostly been overcome. That it scores on the grounds of ease of erection, absence of framework, lightness, and—as a consequence of these three—cheapness, there is little doubt.

Taking the possible "snags," one must first note that there are several manufacturers making a variety of open-web joists in a great range of standardized spans and strengths. They are not riveted to the main girders, but fixed with various types of clips or anchors; all but those of exceptional spans can be lifted into place by two men. The metal lathing is of special interest. It consists of an open welded reinforced wire mesh of about 3 in. to which is attached by secondary wires a membrane of stout waterproof paper with a space of about ½ in. between the reinforcement mesh and the membrane. The latter forms a centering which successfully holds a concrete slab of 3 in. thick, the ½ in. space placing the main reinforcing wires near the bottom of the slab. The sheets of lathing are stretched taut by special tools and wired and clipped into position. The concrete is necessarily mixed dry, a 1, 2, 4 mixture being usual. Provided heavy loads of concrete are not dumped in one spot, the paper is not broken and its waterproof nature is useful in preventing too rapid drying out of the floor. The somewhat deep joists are prevented from racking by a cross bracing of steel wire mechanically tautened. Metal lathing, clipped or wired to the tension members of the girders, these last being often of circular section, supports the ceiling.

The last and principal apparent "snag" is that of fire-resistance. One would think that the steel is far too accessible to heat for safety. This is not the case. Gypsum plaster is highly resistant to the transmission of heat when possessing the strong mechanical bond given by metal lathing.

Ordinary plaster adhesion to brick or concrete will not stand the stresses resulting from high temperatures; metal lathing reinforces it against these in all directions. Further, it is well known that steel at nearly 1,000 deg. Fahr. will safely carry its designed load provided expansion without distortion is possible. The elastic fixing of the joist ends ensures this. The joists are surrounded by a dead air space, and provided the temperature of this air is not raised above 1,000 deg. little damage will result. Actually floors have been tested to 1,800 deg. for four and

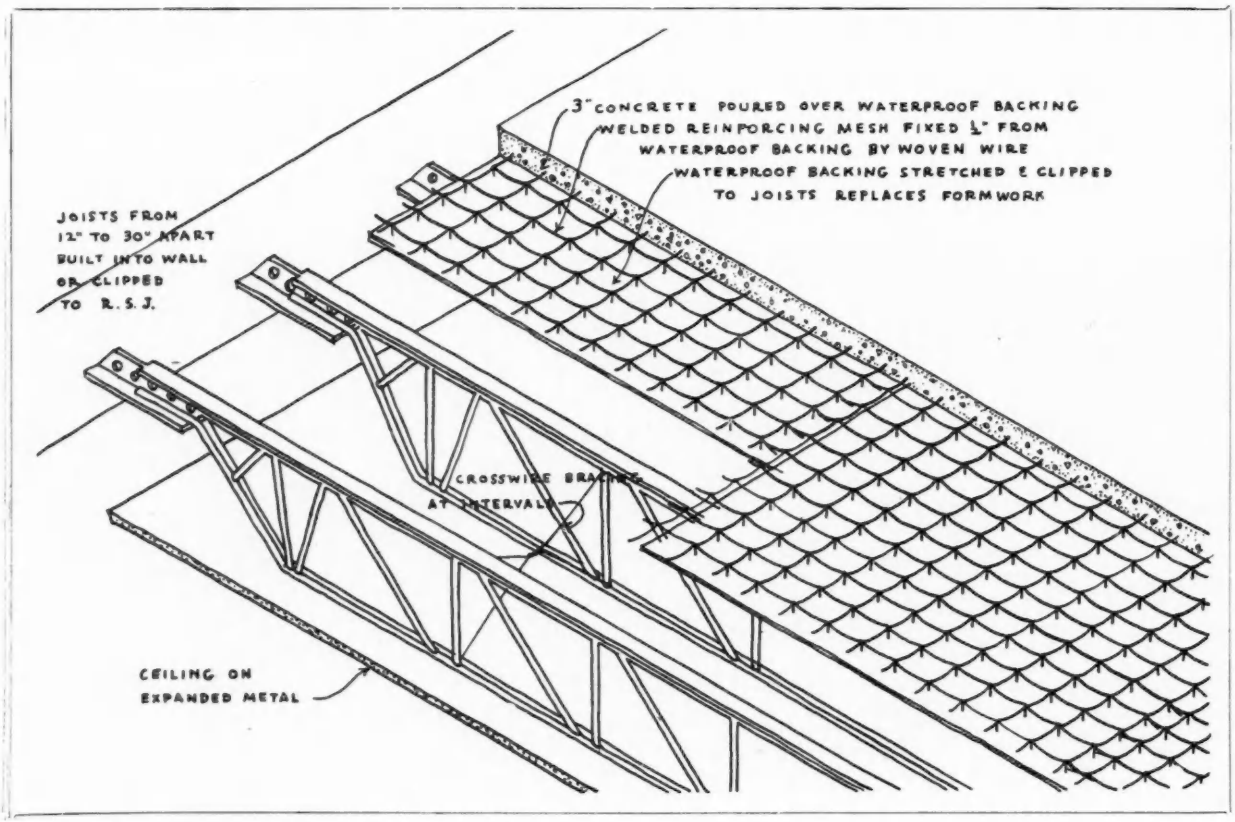
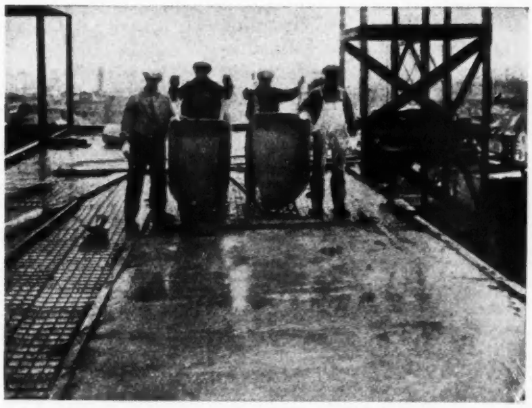


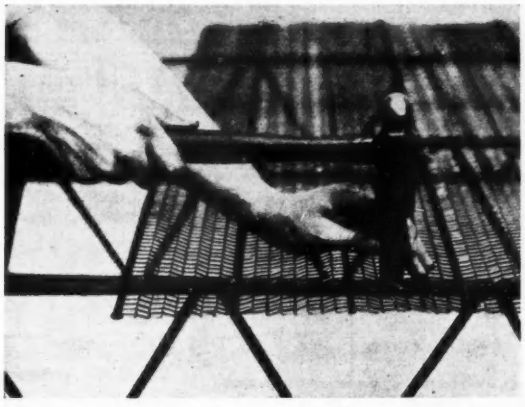
Diagram to illustrate the structure and composition of the type of floor described in the accompanying article. Its chief units are open-web steel joists, wire mesh, and concrete slabs.



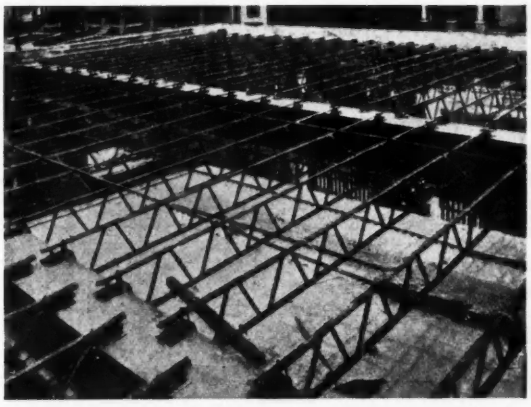
The reinforcing fabric is of welded steel mesh, which is strained by means of a clamp and screw-jack after being laid in position.



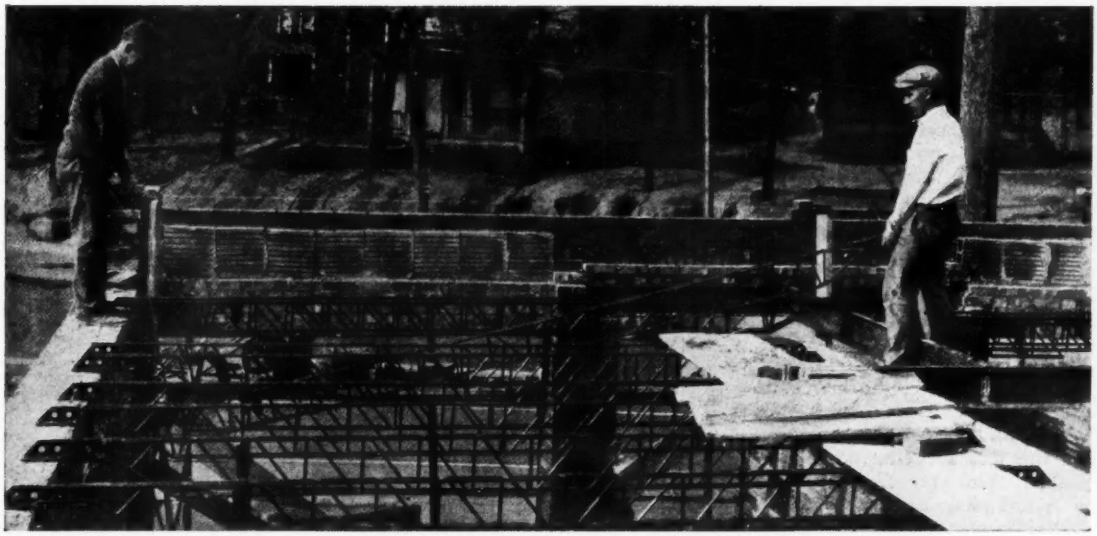
Pouring the concrete after the reinforcing fabric has been strained into position; stout waterproof paper is suspended ½ in. below the fabric.



The method of attaching metal lathing to the joists is here illustrated: wooden wedges are driven through the meshes to hold it in position.



This photograph of a floor in the course of construction is taken to show the use of notched spacing bars in conjunction with wire cross-bridging.



As this picture shows, steel joists of average length are light enough in weight to be easily handled by two men; a member some 12 ft. long is here seen being lifted into position. The members are placed upon the framework or walls without riveting or welding, and being manufactured in standard lengths, call for no fitting or cutting on the site. They are held in place by wire or other metal bridging and bracing, and by anchors or clips of various types.

a-half hours without structurally damaging the joists. The principal guide is the opinion of the American fire-insurance companies, most of whom grant the system minimum rates provided their regulations are fully adhered to. Their regulations are concerned chiefly with the ceiling construction and the non-fixing of joist ends.

Not all American building codes permit this construction as outlined above. The exceptions are all met by making the ceiling 2 in. thick. A close ceiling lath, usually $\frac{3}{8}$ in. mesh, is fixed by special light channels 2 in. below the tension members of the steel joists. A layer of gypsum or concrete is poured on from above before the floor proper is fixed. This penetrates the lath and, when set, forms a key for the ceiling below.

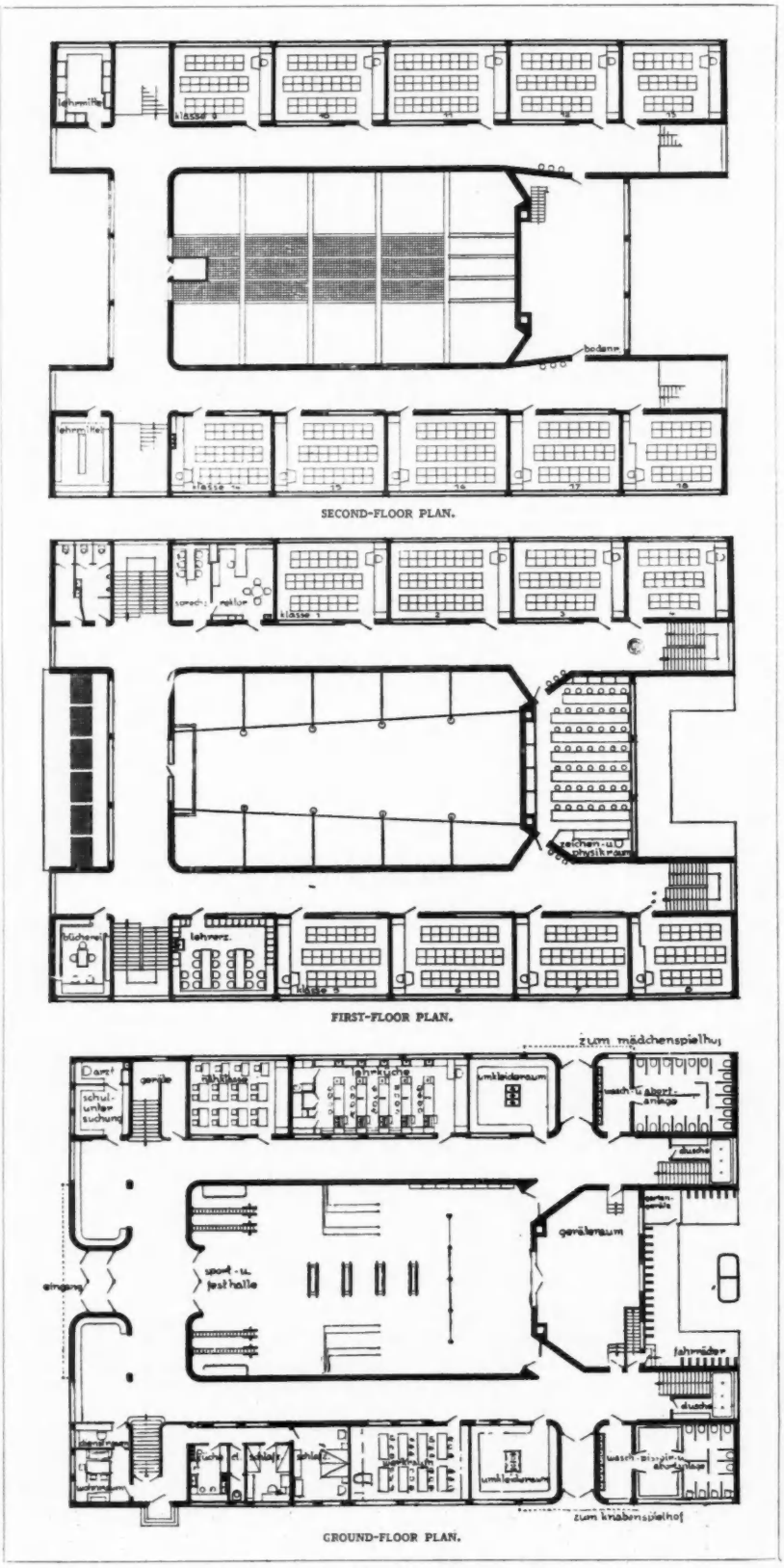
The load capacities naturally vary with the type of spacing of the steel joists, which varies from 12 in. to 30 in. Live load capacities range from 40 to 150 lb. per sq. ft. An average floor has a dead load of about 40 lb. per sq. ft., and of this the steel is about 10 per cent.

Not the least advantage of the system is the ease with which the numerous pipes and conduits necessary in all modern buildings can be run in any direction through the open webs of the joists, an advantage possessed by no other type of floor construction.

While this method will probably not compete with the old-established heavy systems of floor because it does not have the ultimate degree of fire-resistance possessed by these nor the capacity for taking very heavy loads, it undoubtedly fulfils a demand for something cheaper and lighter. Hitherto there has been no such thing as a light fire-resisting floor. Fire protection has had to be paid for in dead load. In England now that there is talk of a reduction of permissible live loads in certain classes of building, this new system will be opportune.

A Model School

The board school at Celle, in Germany, designed by O. Haesler, is divided in the usual manner into separate sections for boys and girls. The distribution throughout is as simple as it is admirable, the interior being handled in the same spirit of order, clarity, and spaciousness which dominates the exterior elevations, as will be seen from the frontispiece. There is a complete absence of institutional grimness or gaunt severity. The general effect is that of a masterly competence and refreshing straightforwardness in composition informed by the painstaking execution of each co-ordinated detail.

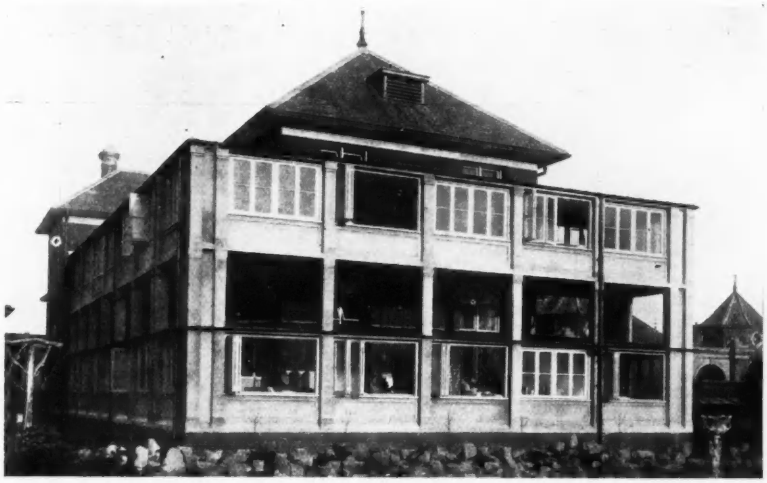


The National School, Celle, Germany. By O. Haesler. Ground, first- and second-floor plans.

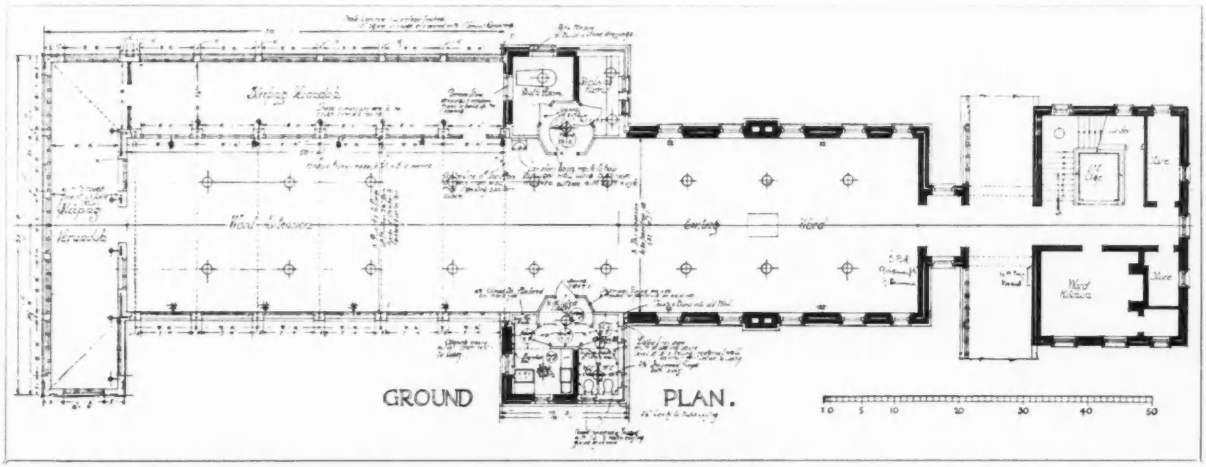
BOSCOMBE HOSPITAL

Additions by Young & Hall

The new additions to the Boscombe branch of the Royal Victoria and West Hants Hospital consist of the extension of the Wills Ward Block in a southerly direction, and the erection of an additional story to the existing ward. In addition, there is on each floor a wide veranda ward, in which it is intended to have patients permanently for open-air treatment. The veranda is of reinforced concrete, the piers between the windows being kept as small as possible. The veranda has a glass roof at a height of 8 ft. to the springing; the space above being left clear for access of air to the upper part of the inner ward. Each veranda ward accommodates nineteen beds.



The new additions to the Boscombe branch of the Royal Victoria and West Hants Hospital include the extension of the Wills Ward Block, the erection of another story to the existing ward, and the provision of additional sanitary accommodation.



The upper floor is similar in design to the ground floor, the plan of which is shown.



The inner ward. The windows are placed higher than usual from the floor. This enables the number of beds installed to be varied without obstructing a window.

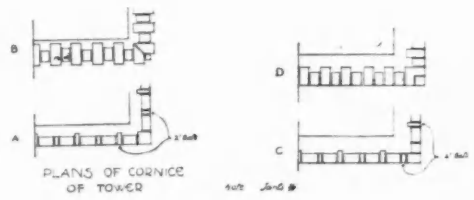
In the inner ward the windows are 8 ft. wide, supported by piers 1 ft. 8 in. wide, the sills being kept higher than usual from the floor. The object of this arrangement is that the beds can be placed indiscriminately of the windows, and a bed added or omitted, as necessity requires. The system was first adopted in one of the huts at No. 5 General Hospital during the war. The hut was built at the suggestion of the late Sir Alfred Pearce Gould. Each side was practically one continuous window, and the sill was placed at a height of about 5 ft. from the floor. The result was in every way satisfactory, and a marked improvement upon the old type of army hut.

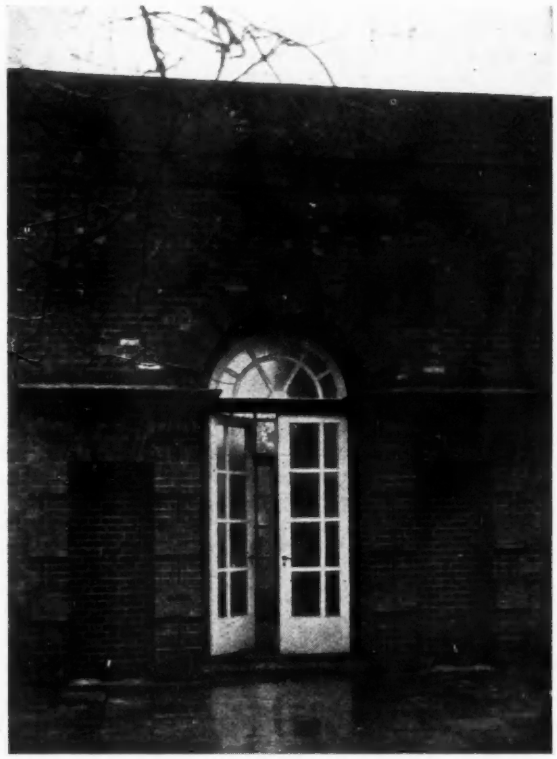
The work was designed by Messrs. Young and Hall, local supervision being carried out by Mr. Hawker, as joint architect.

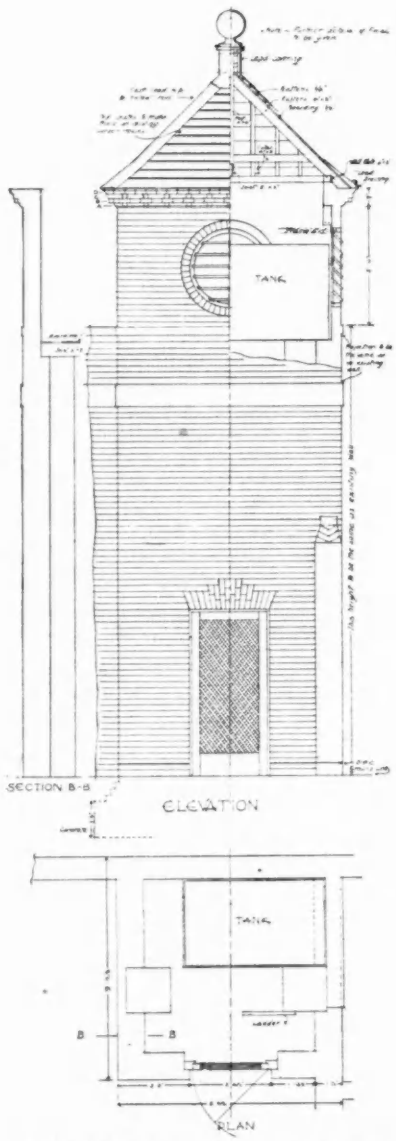
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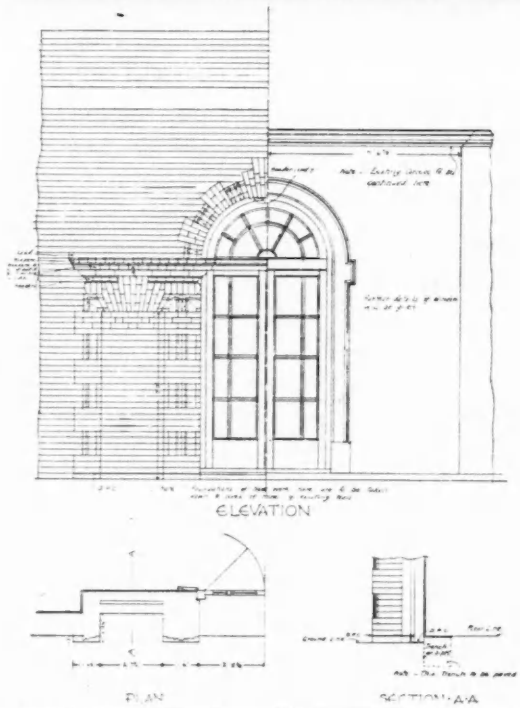
EXTENSION TO ORANGERY: MERLY, HANTS.

DESIGNED BY H. S. GOODHART-RENDEL.

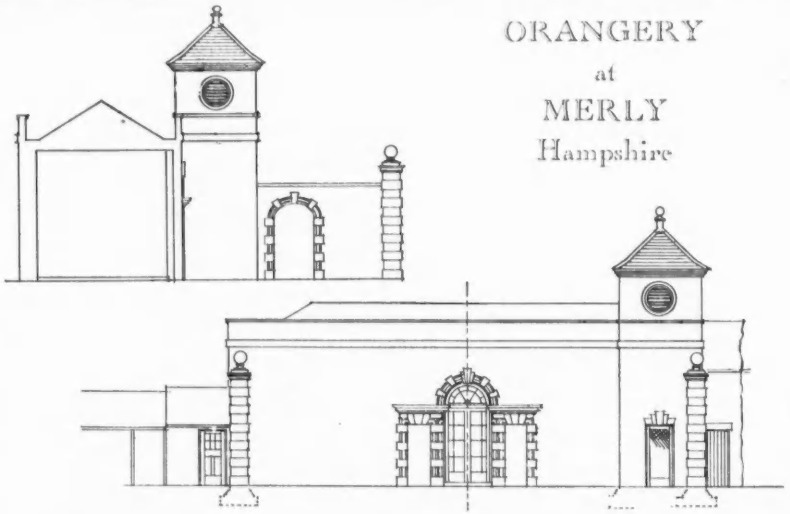








One of these detail drawings and the photograph are of the Venetian main doorway to the orangery, of which general illustrations appear on the facing page, and show the manner in which brickwork has been turned to account. The doorway gives entrance to the building from the garden, and ends the vista of the principal path therein. The bricks are dark in tone, and the woodwork is painted white.



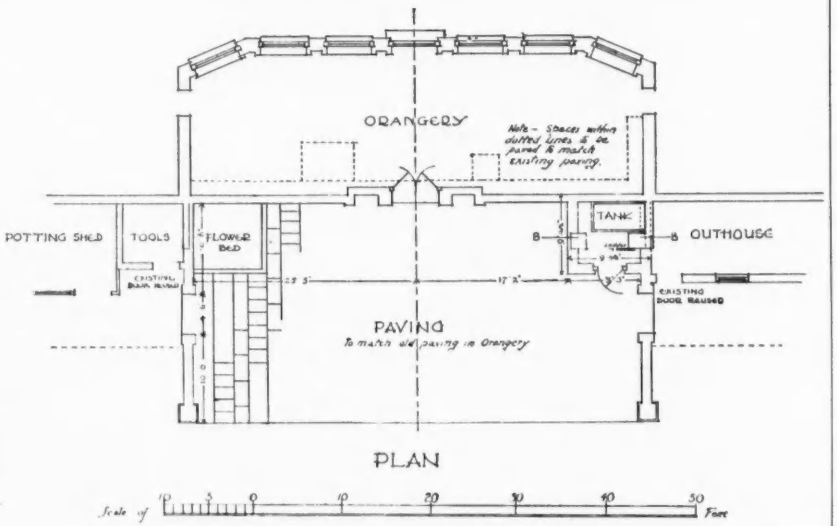
The architect's drawings of the front elevation and of a section showing the turret and one of the screen walls.



The garden front or west elevation, showing the screen walls built to hide the outhouses and potting-sheds extending on either side.



The orangery turns its blank (east) back on the kitchen garden. The new turret masks an ugly iron tank on legs that had been previously added.



Plan of the orangery, showing the disposition of the screen walls and brick pavement which give the whole architectural unity.

LAW REPORTS

LONDON BUILDING ACT: RECOVERY OF EXPENSES FOR REPAIRS

London County Council v. *Owners of Property at Kinglake Street, Southwark. King's Bench Division. Before the Lord Chief Justice and Justices Avory and Branson*

This appeal raised a point as to the statutory remedy of the London County Council under the London Building Act, 1894 (section 116) to recover their expenses properly incurred in repairing a dangerous structure when an owner had failed to do the repairs. The matter came before the Court on an appeal by the Council against a decision of the stipendiary magistrate of Lambeth in favour of the freeholder of Nos. 2 and 3 Brook Cottages, Kinglake Street, Southwark.

Mr. Roome, for the Council, said the point raised was as to the statutory remedy given to the L.C.C. under the London Building Act, 1894 (section 116) to recover their expenses properly incurred in repairing a dangerous structure when an owner had failed to do the repairs. Was the amount to be lost because of a change of ownership of the property that occurred between the original demand for payment and judgment for the sum and the application to the magistrate for a charging order on the premises under the section?

After hearing Mr. Measor for the respondents, the Court allowed the Council's appeal, with costs.

The Lord Chief Justice, in giving judgment, said the case was a clear one. Section 116 of the London Building Act, 1894, said that, when the L.C.C. did repairs to a dangerous building and where expenses were incurred and had not been paid or recovered, a petty sessional court could make an order fixing the amount of such expenses and costs, and order that until after payment of the sum no part of the land or premises concerned should be let for occupation. In those cases, the L.C.C. under the section, after they had repaired the dangerous premises, claimed the amount from the freeholder. The Council contended that the charging order should be on the property, and affected the interests of the freeholder who went to Court to oppose the charging order being made against him. The magistrate was of opinion that the person to answer the application was a Mrs. Crosskeys, who had been a lessee of the premises at the time the repairs were done, but who had since given up the property, and he said the order for payment should be made against her only. He (his Lordship) was of opinion that the magistrate misdirected himself in law. It had been argued with some courage and ingenuity by Mr. Measor that the charge was not on the property at all. But it had been held that the term "owner" meant any person in receipt of any part of the rent or profits. How could it, therefore, be contended that that did not include the person receiving ground rent? If the magistrate's decision was upheld then the result would be that the section would be mere waste paper, because a defaulting owner could escape the result of the possible sterilization of his property until payment was made by the simple expedient of transferring it to somebody else.

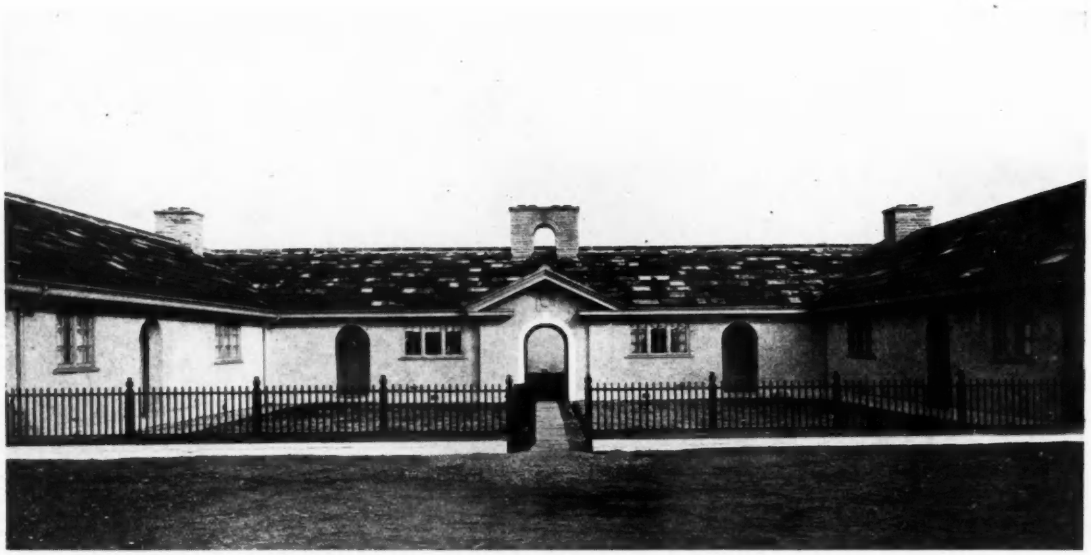
Justices Avory and Branson concurred.

UPKEEP OF PROPERTY

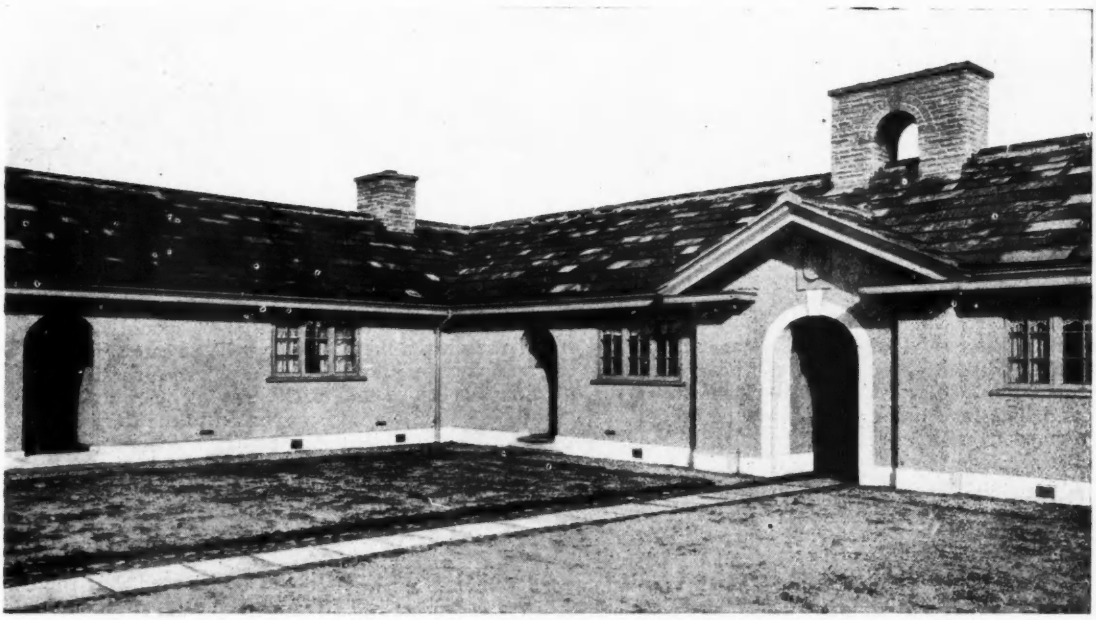
Sutton v. *Commissioners of Inland Revenue. Court of Appeal. Before the Master of the Rolls and Lords Justices Lawrence and Slesser*

In this appeal the Court held that money expended by trustees for the upkeep of property formed part of the income of the appellant, the tenant for life, for purposes of supertax.

The appellant was Mr. Henry Cecil Sutton, of Benham Valence, Berks, who was the tenant for life under the will of his nephew, Sir Richard Vincent Sutton, and he appealed against assessments to supertax for the years ending April 5, 1922 to 1927, in respect of sums expended by the trustees of the will on the upkeep of the mansion and land and sporting rights. The accounts of the expenditure by the trustees on the upkeep of Benham Valence house and gardens and the preservation of game and the keeping up of the Berkshire estate as a first-class shooting estate were made up to November 29 each year. That expenditure came out of the income of the trustees already taxed to income tax. In the appellant's returns for supertax for the years ending April 5, 1922 to 1927 inclusive, no sums were included in respect of: (*a*) The sums expended by the trustees on the upkeep of Benham



Pilkington Memorial Cottages, Clifton, Lancashire. Designed by Thomas Worthington and Son. The main front.



Pilkington Memorial Cottages. Designed by Thomas Worthington and Son. A view from the lawn.

Valence house and grounds as a residence for the appellant; or (*b*) the expenses of the preservation of game on the Berkshire estate and of keeping up the same as a first-class sporting estate.

It was contended for the appellant that the sums expended by the trustees did not form part of the appellant's income, and were not returnable for the purposes of supertax.

On behalf of the Crown it was contended that the sums expended by the trustees formed part of the appellant's total income for supertax purposes, and were properly included in the assessments.

The Special Commissioners of Income Tax held that the sums expended by the trustees formed part of the appellant's income for supertax purposes and they confirmed the assessments, and this decision Mr. Justice Rowlatt upheld.

Mr. Sutton appealed, and his case was argued by Mr. Raymond Needham, K.C.; Sir T. Inskip, K.C., appearing for the Crown.

The Court dismissed the appeal.

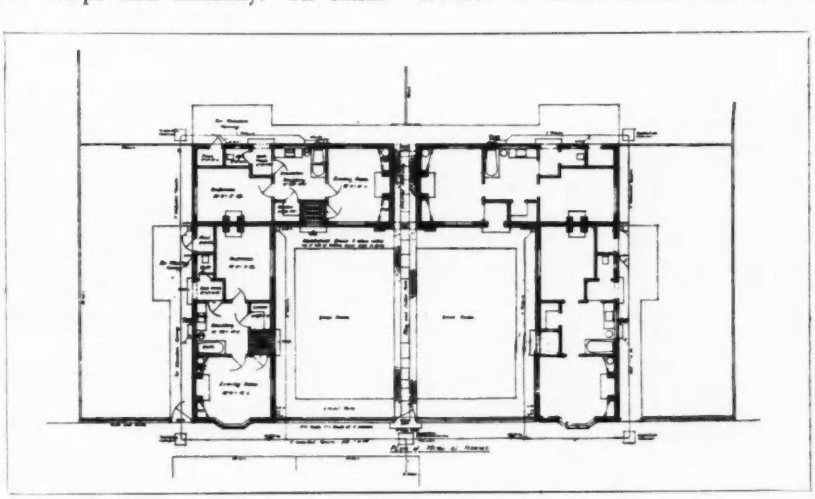
The Master of the Rolls said the appeal failed as the case was well covered by the authorities. What was taxed for the purpose of income tax and supertax was the profits or gains enjoyed by an individual. Mr. Sutton enjoyed the benefit of residing at Benham Valence, and that advantage was contributed to by an outlay by the trustees. If it were not, he would have had to incur a large expense himself. He therefore enjoyed a profit or gain which was assessable.

THE WELSH SCHOOL OF ARCHITECTURE

The school year of the Welsh School of Architecture commences on Monday, September 30. Intending students are advised to apply at an early date for the particulars of the courses of instruction and of the entrance and scholarship examinations. Candidates for the latter should obtain application forms, which must be completed and submitted by September 14.

Ten scholarships, covering tuition fees and maintenance grants of £40 per annum for three years, are offered for competition annually. As candidates for entry to the Welsh School of Architecture are eligible to compete for these scholarships, they are of considerable interest to those contemplating entering the architectural profession. The scholarship examination is a competitive one and is of about the same standard as matriculation. In the case of candidates for the School of Architecture, the subjects are: 1: English; 2: mathematics, two papers—(*a*) algebra and arithmetic; (*b*) geometry and mensuration; 3: history or geography; 4: physics with mechanics; or chemistry; or higher mathematics; 5: a modern language (French, German, or Welsh).

Mr. W. S. Purchon, M.A., A.R.I.B.A., is the principal of the school. The lecturer in architecture is Mr. R. H.



Ground-floor plan of the Pilkington Memorial Cottages.

Winder, M.A., A.R.I.B.A., and the assistant lecturer, Mr. Lewis John, M.A., B.ARCH., A.R.I.B.A. The following local architects assist in the work of the advanced course as honorary lecturers: Messrs. Percy Thomas, F.R.I.B.A.; Ivor Jones, A.R.I.B.A.; T. Alwyn Lloyd, F.R.I.B.A., M.T.P.I.; H. Teather, F.R.I.B.A.; A. L. Thomas, F.S.I., M.T.P.I.; C. S. Thomas, F.R.I.B.A.; J. H. Jones, F.R.I.B.A.

Students also attend courses of instruction in the departments of engineering, technical chemistry, mathematics, and the School of Art, all of which are housed in the same building, while special lectures on (*a*) geology of building materials, (*b*) growth, characteristics and diseases of timbers, and (*c*) law as applied to professional practice are given respectively by Messrs. F. J. North, D.SC., F.G.S.; H. A. Hyde, M.A., F.L.S.; and E. W. David, LL.B.

The three years' full-time day course leads to the award of the certificate, to the holders of which the R.I.B.A. grants exemption from its intermediate examination, while those students who successfully pass through the diploma course are exempted from the R.I.B.A. final with the exception of the subject "Professional Practice." This diploma course follows the certificate course and consists of two sessions, the former of these being of six months' duration only, the intervening six months being spent in architects' offices.

READERS' QUERIES

BACK-TO-BACK HOUSES

H. T. writes: "*The Housing and Town Planning Act of 1925 prohibits the erection of back-to-back houses, with the exception in case of tenements if the medical officer of health shall be satisfied that the means of ventilation is adequate. I have submitted plans for a block of four cottages, as an altered building, two sides of each being external walls with windows, but the authorities say it is not a tenement. I have also submitted a scheme in which there is a large house under one roof; two rooms have been walled off and given a separate entrance, and the upper floor in the rear has always been used as a workroom with separate entrance. It was intended to convert this workroom into a flat, but this has been turned down on the ground that it is making a back-to-back house. Have any cases been decided on the question as to meaning of the word tenement? (The Act does not say 'tenement building,' which is defined in the New York Tenement Act.) Sir F. Pollock has defined a tenement as, 'in modern practice, a portion of a house let off, and so includes a "flat."*"

There is no Housing and Town Planning Act, 1925, but no doubt H. T. refers to section 17 of the Housing Act, 1925. As far as is known no case has been decided as to the definition of "tenement." From the information supplied it is impossible to express an opinion as to whether the contention of the local authority would be likely to be confirmed if the case were taken to Court, but, *prima facie*, it seems likely that it would. It would be open to H. T. to agree a case with the local authority and submit it to the Ministry of Health for decision. Before taking action, H. T. would be well advised to consider section 159 of the Public Health Act, 1875, and section 23 of the Public Health Act Amendment Act, 1907. If the provisions of these sections are actually in force in the district they have the effect of applying building by-laws to the operations specified in the sections.

RESIN FROM BRITISH COLUMBIAN PINE

F. G. G. writes: "*In dealing with joinery work in British Columbian pine I am often troubled by turpentine (or resin) working through the wood and coming out through a stained and varnished surface. This is detrimental to the appearance and renders the surface so sticky that it cannot be dusted or cleaned in the ordinary way. Can you inform me either: 1: how to prevent this coming out; or 2: the best way to clean it off without injury to the stained and varnished surface?*"

1: The usual method consists in rubbing the wood with a solution of caustic soda made up to a strength of about 10 per cent. This should be washed off with some warm water after about half an hour, or the varnish will be patchy.

2: The best method of treating the work after it has been stained and varnished is more or less a matter of opinion that must be determined by the quantity of resin that comes out. One method is to wait till all is dry on a cool day after the flow has taken place and then carefully rub off each drop of resin with a fine piece of pumice-stone, finishing with a little turpentine to equalize the spread of varnish. When the streaks of resin are larger it may be necessary to touch up the varnished surface. The great thing is not to touch the resin when it is warm and sticky. W. H.

WOOD-BORING INSECTS.

"*Sandstone*" *writes:* "*A certain worm has been found in large quantities in an oak wall plate, which is heavily attacked by the 'death-watch' beetle. Can you tell me what it is, its life history, and how it may be removed?*"

This larva is that of the cellar beetle (*Blaps mucronata*). It is not a wood worm in that it does not usually bore or eat wood, but feeds on refuse in rat and mouse runs. As it is not in any way injurious to wood it need not be destroyed, but the surest method of getting rid of it is to clear away all rat and mouse dirt and all the powdered excrement of the wood-boring beetle.

The exact life history of this beetle is not known in all its particulars, but it, of course, passes through the stages of larva, pupa, and perfect insect common to all the beetle tribe. This genus is the real "black beetle," though this name is commonly misapplied to the cockroach.

In cases where wood is infested with wood-boring insects the wood should be cut away where badly bored and all surfaces should be brushed or, better still, treated with a vacuum cleaner. Then a special wood preservative should be either brushed on or sprayed on to the timbers with a hand pump. Two coats are needed, and a supervision also to see that the worm has not returned after a period of, say, five years.

As regards the finished surface of the wood, as little new material as possible should be inserted, but the conditions of the site must be taken into consideration. Many architects now prefer to see the roughened surfaces of the old beams rather than to have them replaced by new. New air inlets are generally necessary since dry rot has to be guarded against as well as wood worm. W. H.

THE TREATMENT OF TEAK

R. A. C. writes: "*I am reconstructing shop premises, and inserting new shopfronts of teak (Moulmein) of the Georgian period. Which is the best means of treating the teak to retain the original texture and colour, and preserving it against weather conditions, without turning the wood dark or black?*"

Teak is a particularly difficult wood to colour as its own natural oil plays its part in the effect. As the natural oil is a sound preservative there is no absolute need for any treatment, and the window frames may be left to go grey by themselves, or more slowly with a coat of wax.

As the greying and lightening may not be considered the treatment whereby the original texture and colour of the teak can be preserved, resort may be had to a mixture of 6 oz. of caustic soda with one gallon of water before waxing the surface. This produces a pleasant dark tone, and in a case where it has been done over a year the staining still wears a good effect.

If a permanent treatment of varnish is wanted great care must be given to the coats of size which protect the surface from the natural oil. If this matter is not given complete attention, or if the varnish is not allowed to dry before its coat is repeated, the wood shows the neglect in patches of varnish becoming grey and white around the edges. W. H.

COMPETITION CALENDAR

December 7. The Provost, Magistrates, and Councillors of Dumfries invite architects practising in Great Britain to submit competitive designs for the Town Hall and Municipal Offices, which it is proposed to erect on the site of the old Town Hall and of the Municipal Offices, Dumfries. Assessor: Sir George Washington Browne, P.R.S.A. Premiums: £300, £200, and £100. Application for conditions of competition, etc., should be made to R. A. Grierson, Town Clerk, Town Hall, Dumfries. Deposit £2 2s. Latest date for sending in designs: December 7.

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

BRITANNIA HOUSE

Following are the names of the contractors and sub-contractors for Britannia House (pages 345-8). General contractor, Albert Monk. Sub-contractors: H. Young & Co., Ltd., steelwork; H. Hope and Sons, Ltd., steel sashes and gearing and patent glazing; Carron Co., cast-iron window backs; S. Bysouth and Sons, stonework; Malcolm Macleod & Co., reinforced concrete staircases; reinforced concrete top cornice, from designs by Considere Construction Co., finished in artificial stone to match the Portland stone; Kleine Floor Syndicate, Ltd., roofs; J. Daymond and Son, Ltd., stone carving and marble wall linings; Colley Meikle & Co., Ltd., heating; Hollis Bros. & Co., Ltd., wood block flooring; Marryat and Scott, Ltd., lift; Potter Rax Gate Co., Ltd., lift enclosure; Davis Bennett & Co., sanitary fittings; Haskins, bronze shop front.

The reinforced concrete retaining walls and certain floors were designed by Considere Construction Co., Ltd.

EX-SERVICES WELFARE SOCIETY

The Rt. Hon. Sir Frederick Milner, Bart., P.C., president of the Ex-Services Welfare Society, has issued an appeal for £25,000 to maintain and develop the work of the society. He points out that mentally disabled ex-Service men number 6,000 in asylums, and no fewer than 32,000 are officially recognized as suffering from neurasthenia. The society was founded solely for the purpose of helping and protecting the interests of the mentally disabled ex-Service men, and has established several homes. These homes are for the purpose of giving curative treatment under ideal conditions. When the men have sufficiently recovered they are selected for the industrial colony at Leatherhead, Surrey, where, after a period of training, they are able to earn a living wage. Most of these men, owing to their nervous condition, can never take their places in the industrial competitive world. Last year no fewer than 10,000 interviews were given at the offices of the Ex-Services Welfare Society. 6,000 meals and 3,000 beds were provided for destitute men at various hostels. Cheques should be sent to Sir Frederick Milner, at 53 Victoria Street, London, S.W.1.

TRADE NOTES

Messrs. J. W. Gray & Co., established 1892, and J. W. Gray and Son, established 1818, both lightning conductor experts and makers, have amalgamated under the title of J. W. Gray and Son, Ltd. Their business is carried on from Brownlow House, 50-51 High Holborn, W.C.1. The directors of the company are Messrs. Alfred Hands, M.I.E.E., F.R.MET.S., Archibald Campbell, J. W. Forrester, F.R.MET.S., and Major Colin Campbell, A.M.I.E.E.

The fitting of a hot-water tank is often a difficult and troublesome job, especially when the tank is in an awkward position. This difficulty is greatly increased by the sharp edges of the seating, which frequently cause injury to the hands and arms of the fitter. Messrs. G. A. Harvey & Co.'s new "Harco" patent manhole seating embodies an important departure from the ordinary seating and altogether eliminates the sharp, dangerous edges of the manhole. The usual method of fixing the compensating ring by riveting has been dispensed with, and an entirely new method of securing the ring adopted. It is claimed that any distortion or unevenness of the surface of the tank around the manhole is avoided, and a perfect joint obtained. At the same time the turned-over edge of the manhole presents a smooth, rounded surface which cannot cause any injury when fitting the tank. The strength of the tank is also increased by a non-riveted compensating ring.

Presotim is a new coal by-product which decorates wood and preserves it and at the same time helps the householder to make his house attractive. For the householder with artistic tastes a new field of possible achievement is opened. Wood stained to match the colour of carpets, of furniture, of wallpaper; wainscoting preserved and coloured, the grain losing nothing of its delicate charm; tints to suit picture frames and mantelpieces, all these and more besides offer plenty of scope for experiment. Presotim is claimed to be a coloured preservative which decorates and preserves at the same time. It can be varnished, french polished or waxed, and the raw wood should be sprayed or soaked in the fluid or the latter may be applied with a brush. It is claimed that Presotim neither cracks nor blisters.

A new booklet issued by Messrs. Gent & Co., of Leicester, explains the advantages to be secured by the Reflex pendulum control which can be added easily to any workmen's register in use, making that register keep time with other clocks and registers in the time circuit. By means of this pendulum control it is possible to have universal time throughout an establishment, not only on the inside but on the outside clocks. It is claimed that the control is unique in that if the time circuit is accidentally broken the registers "carry on" under their own power and time-keeping and costing systems are not disarranged. In fitting the control nothing is removed from the register. A spring attachment is clamped on to the pendulum and the controlling device is screwed to the case and connected to the time circuit. The register is wound up in the usual way. It operates by the clockwork exactly as supplied by the manufacturer, but by the "Reflex" movement the pendulum is compelled to keep time with the transmitter controlling the time circuit and other clocks in the circuit. On the last page of the booklet is an impressive list of prominent users of the "Pul-syn-etic" clocks and Reflex controls of the company.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

24865. Quicktho (1928), Ltd. Devices for opening and closing windows. August 14.

24804. Sharp, J. Window controls. August 14.

24906. Smith, M. Door and window holders. August 15.

SPECIFICATIONS PUBLISHED

317116. Carson, N. B. Reinforced concrete structures.

316906. Deniau, M. Method and apparatus for the production of facings, such as road surfaces and floorings or other structures

300582. Jillings, C. S. Process and apparatus for the manufacture and ornamentation of building-bricks and other clay or like products.

ABSTRACT PUBLISHED

314354. Naamlooze Vennootschap De Nieuwe Isoleer Maatschappij De Nim, Schiedam, Holland. Flooring slabs; floors.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The twelfth-century church at CHINGFORD is being restored at a cost of £14,000.

The WATFORD Corporation is arranging for the provision of further houses on the Harebreaks housing estate.

The WATFORD borough engineer has prepared a preliminary scheme for the provision of a new fire station, with quarters for firemen.

Messrs. S. H. White and Sons are to erect a building in Hereford Gardens, Oxford Street, LONDON.

A scheme for the construction of a swimming pool has been agreed upon by the WATFORD Corporation. Consideration is to be given to the provision of slipper baths.

Plans are being prepared for extending Bush House, ALDWYCH, with a front on the Strand. It is intended to begin the erection of the east wing of the Strand frontage in the autumn. It is hoped that in two years the buildings, which cover the whole area to be occupied by Bush House, will be completed.

A new theatre, to seat 1,220 people, is to be built in the WEST END, at a cost of over £250,000. The site is nearly 10,000 feet square, bordered by Stacey Street, Church Passage, Shaftesbury Avenue and New Compton Street. It will involve the demolition of many old houses and small business premises.

Plans passed by the CROYDON Corporation: Extensions to drapery premises, Midele and Surret Streets, for Messrs. Grant Bros., of High Road; garages, workshops, and flats, Oakhill Road, for Mr. W. T. Cripps; stores and mixing-room, Oval Road, for Messrs. Rhinos, Ltd.; generating station, Factory Lane, for borough electrical engineer; ten houses, Crescent Way, for Mr. H. Macintosh; twenty houses, Zermatt Road, for Messrs. Smith, Wilkinson, Ltd.; alterations and additions, 27 London Road, for Mr. W. G. Leach; nurses' home, Mayday Road, for Messrs. Berney and Sons, for Board of Guardians; six shops, London Road, for Mr. H. W. P. Young; offices, George Street, for Woolwich Equitable Building Society; additions, laundry, Whitehorse Road, for Mr. C. A. New; three houses, Woodmere Avenue, for Mr. R. W. Trent; fitter's shop and offices, Factory Lane, for Mr. G. P. Banbury; dairy premises, Mitcham Road, for Mr. D. E. Davies; twenty-four houses, Mitcham Road, for Mr. H. Hemmings, director of East Surrey Gravel Pits, Ltd.; extensions, hall, Wellesley Road, for Mr. R. Tinkler, for Ruskin House, Ltd.; eleven houses, Crescent Way, for Mr. H. Macintosh; thirty-one houses, Norton Gardens and Hatch Road, for Messrs. Truett and Steel; fifteen houses, Springfield Road, for Mr. E. W. Pritchett; messroom, Purley Way, for Messrs. Carter Paterson & Co., Ltd.; nine houses, Eldon Avenue, for Messrs. Paish, Tyler and Crump; additions to church rooms, St. Luke's Church, Spring Lane, for Messrs. W. Akers & Co., Ltd.; forty-three garages, Pollards Hill South, for Mr. F. Salmon; thirty-four houses, Shirley Avenue, for Messrs. Paish, Tyler and Crump.

EASTERN COUNTIES

Restoration of the side chapels in PETERBOROUGH Cathedral, which have been used as storerooms, is being undertaken on the instructions of the Dean and Chapter.

SOUTHERN COUNTIES

The EASTBOURNE Corporation is to borrow £50,000 for further housing advances.

The HERNE BAY U.D.C. recommends the scheme for the layout of the pier entrance at an estimated cost of £1,500, and for the erection of semi-underground conveniences for both sexes, together with an information bureau and entertainments manager's office on the site of the present rocket apparatus house, at an estimated cost of £3,000.

Plans passed by the HERNE BAY U.D.C.: Two bungalows, Sea Street, for Messrs. Goodwin and Russell; two bungalows, Minster Drive, for Mr. W. Hancock; house, Fleetwood Avenue, for Mr. W. Hancock; house, Carlton Hill, for Mr. J. Wilson; house, Albany Drive, for Messrs. Goodwin and Russell; house, Central Avenue, for Mr. J. H. Bowell.

SOUTH-WESTERN COUNTIES

The PLYMOUTH Corporation is to borrow £100,000 for further housing advances.

The managers of the St. Peter's School, PLYMOUTH, are shortly to reconstruct the school buildings.

Mr. Henry A. Garrett, borough engineer of TORQUAY, has prepared plans for the erection of a swimming bath at a cost of £11,800.

The CHELTENHAM Corporation is purchasing Gibraltar House, which adjoins the Art Gallery, for future extensions to the Art Gallery.

At a meeting of the CHELTENHAM Corporation, Mr. Malvern, architect, submitted the final layout plan of Pilley Lane site, providing for seventy-five three-bedroom houses and twenty-eight two-bedroom houses. Tenders are to be invited for the erection of the houses.

Plans passed by the CHELTENHAM Corporation: House, Whaddon Road, for Mr. J. Davis; two houses, Old Bath Road, Leckhampton, for Mr. A. Yates; two bungalows, Cheltenham-Tewkesbury Road, Uckington, for Mr. A. Williams; bungalow, Warden Hill Road, for Miss E. E. Sainsbury; house, Rossley Manor, Dowheswell, for Mr. R. C. Coxwell Rogers; two houses, Warden Hill Road, for Mr. E. Huntington.

Plans passed by the TORQUAY Corporation: Alterations and additions, 158 Union Street, for the Trades Club and Institute, Ltd.; two houses, St. Marychurch Road, for Mr. Stuckey; bungalow, Middle Warberry Road, for Miss Boucher; bungalow, Warberry Vale Estate, for Mr. F. W. Shellard; alterations, Walnut Road, for Lloyds Bank, Ltd.; house, Barton Road, for Mr. T. H. Crossman; house, Barnfield Road, for the Gower Construction Co.; four houses, Leys Road, Chelston, for the Chelston Building Co.; house, Cadewell Lane, for Messrs. Bouttens and Sons; house, Ilsham Drive, for Mrs. Wilson; house, Ilsham Drive, for Mr. W. Clarke; house, Oxlea Road, for Mr. W. Williamson; additions, Queen's Hotel, Victoria Parade, for Mr. F. P. Harrison.

MIDLAND COUNTIES

The WARWICKSHIRE C.C. is to erect eighteen houses for the police in various districts.

The WARWICKSHIRE Education Committee is to prepare a scheme for remodelling the Coleshill Secondary School.

Mr. John G. Gray, of Coventry, has acquired part of the Hall Estate, STIVICHALL, for development as a building estate.

The STOKE-ON-TRENT Corporation has acquired three acres of land at Etruria Vale Road, Hanley, for a housing scheme.

The NORTHAMPTON Education Committee has obtained a site on the Kettering Road estate for the erection of an elementary school.

The WARWICKSHIRE C.C. is to prepare plans for the provision of adequate accommodation for the nursing staff and additional accommodation for patients at the mental hospital.

Plans have been prepared by Mr. C. A. Bunch, Warwickshire county architect, for the adaptation and enlargement of existing buildings and provision of new buildings with complete services to form a colony for mental defectives at WESTON.

Improvements are to be carried out at the BOSTON docks, which include alterations to the fish pontoon to provide for the importation of fruit, at an estimated cost of £600, and the erection of a new coal hoist with necessary appliances, including electric-driven pumps, and alteration of sidings, at an estimated cost of £16,000.

The CHESTERFIELD Picture House is to undergo extensive alterations, which will include the provision of 300 extra seats in the stalls and, probably, the erection of a commodious stage. The purchase of adjoining property will enable the directors to erect four large modern shops, and over these is to be placed a handsome café ballroom, which will be one of the finest in the provinces.

Plans passed by the NORTHAMPTON Corporation: Six houses and shops, Harborough Road for Mr. J. Dunkley; house, Lumbertubs Lane, Weston Favell, for Mr. A. F. Cooke; six houses, Main Street, Hardinstone, for Messrs. Ansell and Brown; stores, Chestnut Road, for Messrs. Jordans; four houses, Kingsley Road, for Messrs. Chowns, Ltd.; additions to store and showrooms, 9 The Parade, for Messrs. Abel and Sons, Ltd.; reconstruction of storerooms and offices, Angel Street, for Northampton Electric Light and Power Co., Ltd.; alterations and additions, 94 Abington Street, for Mr. E. Poole; factory, Freehold Street, for Messrs. W. Barratt & Co., Ltd.; warehouse, Kingswell Street, for Messrs. Bassett Lowke, Ltd.; extensions, Brockton Street and Bunting Road, for Messrs. G. Webb and Sons; house, Trinity Avenue, for Mr. W. Wright; additions, 44 and 46 Gold Street, for Messrs. Mentone, Ltd.

NORTHERN COUNTIES

The Hull city architect is to prepare sketch plans for a chapel at the new cemetery at EAST HULL.

The Union Bank of Manchester, Ltd., is to erect new premises at Holmes Chapel, CHESHIRE.

Work has begun on the foundations of the MELTON MOWBRAY War Memorial Hospital extensions, which are to cost £14,000.

The Cheshire Education Committee has voted £16,391 for the erection of an elementary school at WOODSLEE, Bromborough.

The Cheshire Education Committee has voted £26,764 for the erection of an elementary school in Stanton Road, BEBINGTON.

The Cheshire Education Committee has acquired a site in Oldfield Brow, ALTRINCHAM, for the erection of an elementary school.

The Cheshire Education Committee is to erect a modern council school at John Street, ELLESMERE PORT, at a cost of £16,715.

The CHORLEY Corporation has asked the Housing Committee to report in regard to the erection of further houses.

The governors of Chorley Hospital are to proceed with the erection of new hospital buildings in Preston Road, CHORLEY.

The CHELMSFORD Corporation is considering the purchase of 25 acres of land north of the Boarded Barns estate for the erection of further houses.

The MORECAMBE borough engineer is to prepare a scheme for the clearance and reconstruction of areas near Church Street and New Inn Yard.



House at Hampstead. By W. Sydie Dakers. The exterior is faced with hand-made purple-brown bricks, with red brick quoins and dressings.

Plans for the rebuilding of the Palladium Cinema at SOUTHPORT are being prepared by Mr. W. E. Trent, architect.

The MORECAMBE Corporation has decided upon a site at the Calton estate for the new town hall which is estimated to cost £60,000.

The BRADFORD Corporation Baths Committee are to instruct the city architect to prepare plans and estimates for the erection of a district bath at Thorpe Garth, Idle.

The Cheshire C.C. has voted £2,500 for the provision of workshops for patients at PARKSIDE Mental Hospital and also £1,225 for alterations and additions at UPTON Mental Hospital.

Alterations and extensions at WINSFORD VERDIN County School has been decided upon by the Cheshire Education Committee, and £12,200 is to be expended.

The CHESHIRE C.C. has purchased 33 acres of land at Lea Green, Church Minshull, 144 acres of land at Broomhall, and 107 acres of land at Coole Pilate, for the purposes of small holdings.

Building operations have begun in connection with the Regal Cinema, Norris Green, one of LIVERPOOL'S newest housing estates. It will seat over 1,600 and is being erected by the Carlton Cinema Company.

The BRADFORD Co-operative Society has applied for permission to erect shops and business premises at the south end of Ravenscliffe Avenue, in the midst of one of the Bradford Corporation's biggest housing estates at Eccleshill.

Plans for a new Roman Catholic school proposed to be built at ECCLESHILL have been submitted by Dean Schrieber to the Street Improvement and Building Committee of the Bradford Corporation and approved.

A new kinema is being built at COXHOE. Seating accommodation is being provided for 700 people, and there is to be a large waiting-room. The estimated cost of the building is between £4,000 and £5,000. The architects are Messrs. Hayes and Grey.

Plans passed by CHORLEY Corporation: Two houses, Hollinshead Street, for Rev. C. G. Roffe-Silvester; alterations and additions, Corn Mill, Lyons Lane, for Mr. Wm. Hoole; oil tanks, depot, Railway Street, for Anglo-American Oil Co., Ltd.; two houses, Moor Road, for Mr. Thomas Seed.

Plans passed by the MORECAMBE Corporation: four houses, Lancaster Road, for Mr. W. Vernon; three houses, Margaret Street, for Mr. J. W. Hacking; two houses, Woodhill Lane, for Mr. Wm. Sanders; bungalow, Queen's Drive, for Mr. G. H. Wright; house, Lodges Grove, for Mr. A. E. Dent.

There will be two reservoirs close together, and a part of the famous rhododendron drive to Errwood Hall will be engulfed in the STOCKPORT Corporation's scheme in connection with the Goyt Valley, near Buxton. The reservoirs will be almost two miles in length, and will hold 900,000,000 gallons of water. The Corporation has promotod a Bill in Parliament for powers to carry out the work.

The SALFORD City Council is to make a bid to rival Manchester as a shopping centre if the committee appointed by the Council reports favourably on a scheme to create a business centre in the area between the River Irwell, New Bailey Street, Chapel Street, and Blackfriars Street. The scheme is an attempt to convert the Salford side of the Irwell into a shopping area comparable with Deansgate on the other side.

SCOTLAND

A new kinema is being erected at STENHOUSEMUIR.

The GLASGOW Corporation Baths Committee recommends the sum of £34,000 in connection with the proposal for the erection of baths in Wolseley Street.

The Plans Committee of the ABERDEEN Town Council at the last meeting passed the plans of two detached bungalows in Leslie Road, and a bungalow and garage in Anderson Drive, at a total estimated cost of £2,450. Eighteen plans of other buildings and alterations were approved, the estimated cost being £4,750. The total estimated value of the property for which plans were submitted was £7,200.

Plans for the erection of a large building in St. Vincent Street, Glasgow, were passed by GLASGOW Dean of Guild Court. The building will be constructed for the Commercial Union Assurance Co., Ltd., and will occupy one of the most commanding sites in the city. It will be eight stories in height, and will stand on the high ground at the corner of St. Vincent Street and Wellington Street.

The Dean of Guild Court has approved plans by the Housing Department of GLASGOW Corporation for the erection of 102 dwelling-houses at Braidfauld Street housing estate, Tollcross, and 120 tenement dwelling-houses at the rehousing scheme in Janefield Street, Parkhead. The houses at Braidfauld Street will be of three and four apartments, and will involve an expenditure of nearly £34,000, while those in Janefield Street will be of two and three apartments, the total cost of erection being nearly £37,000. Other linings granted were as follows: Savings Bank of Glasgow, to erect bank premises in Govan Street at Crown Street; Glasgow Education Authority, to erect a drill hall at Wolseley Street, Logan Street, and Bilbao Street; William Vernal, builder, 45 Manse Street, Renfrew, to erect nine bungalows in Hatton Gardens at Latimer Gardens; William Taylor, builder, 2107 Paisley Road, to erect 26 shops in Dumbarton Road and Victoria Road, Scotstoun; Lauder and Shaw, building contractors, Milngavie, to erect two semi-detached villas at Crookston Drive.

MISCELLANEOUS

The CAPE TOWN Corporation is considering plans and estimates for the enlargement of Sea Point Hall and the erection of a new hall at Woodstock.

The Union Government and municipal authorities are making arrangements for an exhibition of South and Central African raw materials. Buildings will cost £300,000, and will be erected either at CAPE TOWN or JOHANNESBURG.

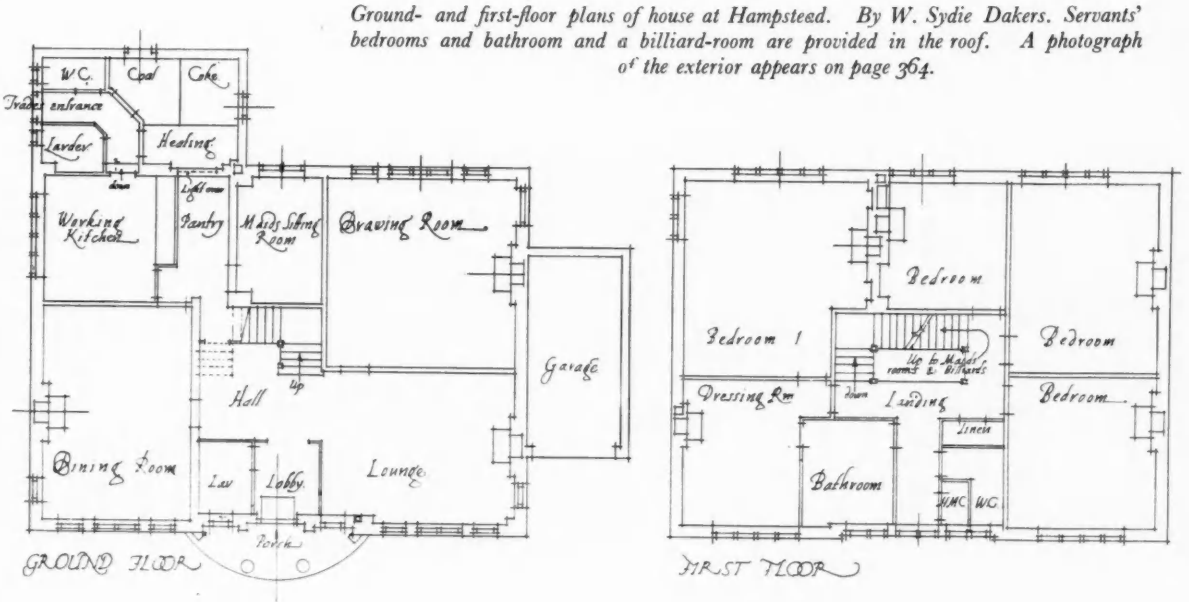
Plans have been presented to DOUGLAS Town Council (Isle of Man) for extensive alterations to the Corporation's gardens in the centre of the promenade. They include building a long colonnade in front of the gardens with the erection of an arcade and shops; also a shelter at the south corner. The improvements will cost £42,000.

An eighty-story skyscraper, which it is claimed will have a tower which will rise nearly 200 ft. above any existing building in NEW YORK, is to be be built on the site of the Waldorf-Astoria Hotel. It is stated that the structure will cost upwards of £12,000,000, and will be able to house 60,000 persons.

The South African House of Assembly has recently authorized a guaranteed loan of £1,500,000 for the purpose of proceeding with the construction of the long-projected railway bridge over the Lower Zambesi River to connect BEIRA, in Portuguese East Africa, with BLANTYRE, in British Nyasaland, at a point in the neighbourhood of Chindi.

Plans for a new bridge across the Arno have been approved by the municipal council of FLORENCE. It has been decided that the new bridge shall be built near the old Ponte Sospeso, which is in a precarious state and incapable of meeting the increased traffic demands of the district. It will be 420 ft. long and 60 ft. wide, and will have three arches. The work is to be completed in twenty-eight months and will cost about £85,000.

Ground- and first-floor plans of house at Hampstead. By W. Sydie Dakers. Servants' bedrooms and bathroom and a billiard-room are provided in the roof. A photograph of the exterior appears on page 364.



RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_2	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	•1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_2	Barnard Castle	N.E. Coast	1 6	1 1½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead ..	N.W. Counties	•1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EAST-BOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	•1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	•1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	•1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	•1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	•1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	•1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

• In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour*; LABOURER, 1s. 4d. *per hour*; NAVVY, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; BRICKLAYER, 1s. 9d. *per hour*; PLUMBER, 1s. 9d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour*; LABOURER, 1s. 4d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	0
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¼ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	0	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour*; DO. *fixer*, 1s. 10d. *per hour*; LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour*; TILER, 1s. 9d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies				£13	0	0
Countess				25	0	0
Duchess				32	0	0
Old Delabole	*Med. Grey*			*Med. Green*		
24 in. × 12 in.	£42	11	3	£45	1	0
20 in. × 10 in.	31	4	3	33	0	6
16 in. × 10 in.	20	18	0	22	4	9
14 in. × 8 in.	12	1	0	12	16	3
Green Randoms, per ton				8	3	9
Grey-green do., per ton				7	3	9
Green peggies, 12 in. to 8 in. long, per ton				5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey			Med. Green		
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies, 12 in. to 8 in. long				4	13	6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	10

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour*; JOINER, 1s. 9d. *per hour*; LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	4
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	3
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	9
DO. framed in floors, roofs, etc., per ft. cube	0	5	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1½ in. thick, per yd. sup.	0	12	0
Maple 1½ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¾ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
DO. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour*; MATE, *do.* 1*s.* 4*d. per hour*; ERECTOR, 1*s.* 9½*d. per hour*; FITTER, 1*s.* 9½*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour*; MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour* (*plus allowances in London only*); LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅜ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup., per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ¼ in., per ft.	0	0	6½
DO. *½ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs, per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up £0 3 0
Glazing only, polished plate, 6½d. to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; FRENCH POLISHER, 1*s.* 9*d. per hour*; PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	8
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	1/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3½	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	8½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, SEPTEMBER 11

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 12

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. **12 noon.**

INTERNATIONAL HOUSING AND TOWN PLANNING CONGRESS opening at Rome. Open until September 22. Particulars from the Organizing Secretary, Mr. H. Chapman, 25 Bedford Row, W.C.1.

FRIDAY, SEPTEMBER 13

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Tudor and Jacobean Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

BRITISH MUSEUM, Bloomsbury, W.C. "Greek Sculpture—II." By W. W. Skeat, M.A. **3 p.m.**

SATURDAY, SEPTEMBER 14

Sunrise, 6.32. Sunset, 7.18.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Italian Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to Croydon Aerodrome. Meet main entrance 2.50 p.m. **2.50 p.m.**

WELSH SCHOOL OF ARCHITECTURE, Technical College, Cardiff. Latest date for submission of application forms for admission to the school.

MONDAY, SEPTEMBER 16

BRITISH MUSEUM, Bloomsbury, W.C. "Monuments of Egypt—II," "Greek Sculpture—II." Both at 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Persian Metalwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

TUESDAY, SEPTEMBER 17

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Pottery." By L. O. Faraker. **12 noon.**

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS. London and Home Counties Branch. Visit to Messrs. Mander Bros. Works, Wolverhampton. Meet outside entrance gates No. 3 Platform, Paddington. Depart 9 a.m. Party limited to fifty. Applications to Joint Hon. Branch Secretaries, 1 Wilbraham Place, S.W.1, before September 13.

WEDNESDAY, SEPTEMBER 18

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Metalwork." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Medieval Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C. "Origin of Architecture." By Cecil Hallett, B.A.

FRIDAY, SEPTEMBER 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "The Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. **12 noon.**

THE ASSOCIATION OF SPECIAL LIBRARIES AND INFORMATION BUREAUX. Annual Conference (Sixth), Trinity College, Cambridge. September 20–23.

SATURDAY, SEPTEMBER 21

Sunrise, 6.42. Sunset, 7.3.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chippendale." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to Westminster Cathedral. Meet main entrance 2.15 p.m. **2.15 p.m.**

THE LONDON SOCIETY, Lancaster House, S.W.1. Visit to Coal Exchange and the Roman Hypocaust, 96 Lower Thames Street, E.C. Applications for tickets to the Secretary of the Society.

MONDAY, SEPTEMBER 23

BRITISH MUSEUM, Bloomsbury, W.C. "Arts and Customs of Ancient Egypt—II." 12 noon. "Records of Babylon and Assyria—I." 12 noon. "Greek Sculpture—I." 3 p.m. "Monuments of Egypt—II." 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. 12 noon. "Italian Renaissance Furniture." 3 p.m. **12 noon.**

NORTHAMPTON POLYTECHNIC INSTITUTE, St. John Street, E.C.1. Commencement of classes in Civil and Mechanical Engineering.

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Commencement of all classes.

TUESDAY, SEPTEMBER 24

BRITISH MUSEUM, Bloomsbury, W.C.1. "Early Britain—III." 12 noon. "Greek Sculpture—II." 3 p.m. "Monuments of Assyria." 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W. "French Renaissance Furniture." 12 noon. "French Eighteenth-century Furniture." 3 p.m. **12 noon.**

WEDNESDAY, SEPTEMBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." 3 p.m. **3 p.m.**

THURSDAY, SEPTEMBER 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Seventeenth-century Furniture." 12 noon. "English Eighteenth-century Furniture." 3 p.m. "Jade and Lacquer." 7 p.m. **12 noon.**

FRIDAY, SEPTEMBER 27

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." 12 noon. "Chinese Sculpture." 3 p.m. **12 noon.**

SATURDAY, SEPTEMBER 28

Sunrise, 6.54. Sunset 6.54.

BRITISH MUSEUM, Bloomsbury, W.C.1. "Monuments of Assyria—II." 3 p.m. "Greek Sculpture—II." 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. 12 noon. "Ironwork." 3 p.m. **12 noon.**

THE LONDON SOCIETY, Lancaster House, S.W.1. Visit to Guy's Hospital, St. Thomas's Street, S.E.1. Applications for tickets to the Secretary of the Society.

MONDAY, SEPTEMBER 30

ROYAL SANITARY INSTITUTE, 90 Buckingham Gate, S.W.1. Opening of the Autumn session of training courses for examinations for sanitary inspectors, smoke inspectors, associateship (general hygiene and sanitation), associateship (food, hygiene, and sanitary science). Particulars obtainable from the Secretary at the above address.

WELSH SCHOOL OF ARCHITECTURE, Technical College, Cardiff. Opening of session.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. **12 noon.**

THE ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. "Sanitary Inspectors Course." Commencing at 6 p.m. **6 p.m.**

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last day for entry for Surveyors' Institution Examinations.

SATURDAY, OCTOBER 5

Sunrise 7.6. Sunset, 6.30.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to London Telephone Exchanges—City, Central, and Trunk. Meet G.P.O. (South), Carter Lane, E.C.4, at 2.15 p.m. **2.15 p.m.**

MONDAY, OCTOBER 7

LONDON UNIVERSITY, Gower Street, W.C. Opening of session.

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. Opening of session.

TUESDAY, OCTOBER 8

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last day of entry for R.I.B.A. Intermediary Examination.

THURSDAY, OCTOBER 10

BEDFORD COLLEGE, Regent's Park, N.W. Opening of session

THURSDAY, OCTOBER 17

ARCHITECTURE CLUB. At the London School of Economics. Supper Discussion. Report as to arrangements. **5.45 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. **12 noon.**

MONDAY, OCTOBER 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. 12 noon. "Architecture." By L. O. Faraker. 3 p.m. **12 noon.**

FRIDAY, OCTOBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chinese Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

WEDNESDAY, OCTOBER 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

MONDAY, NOVEMBER 4

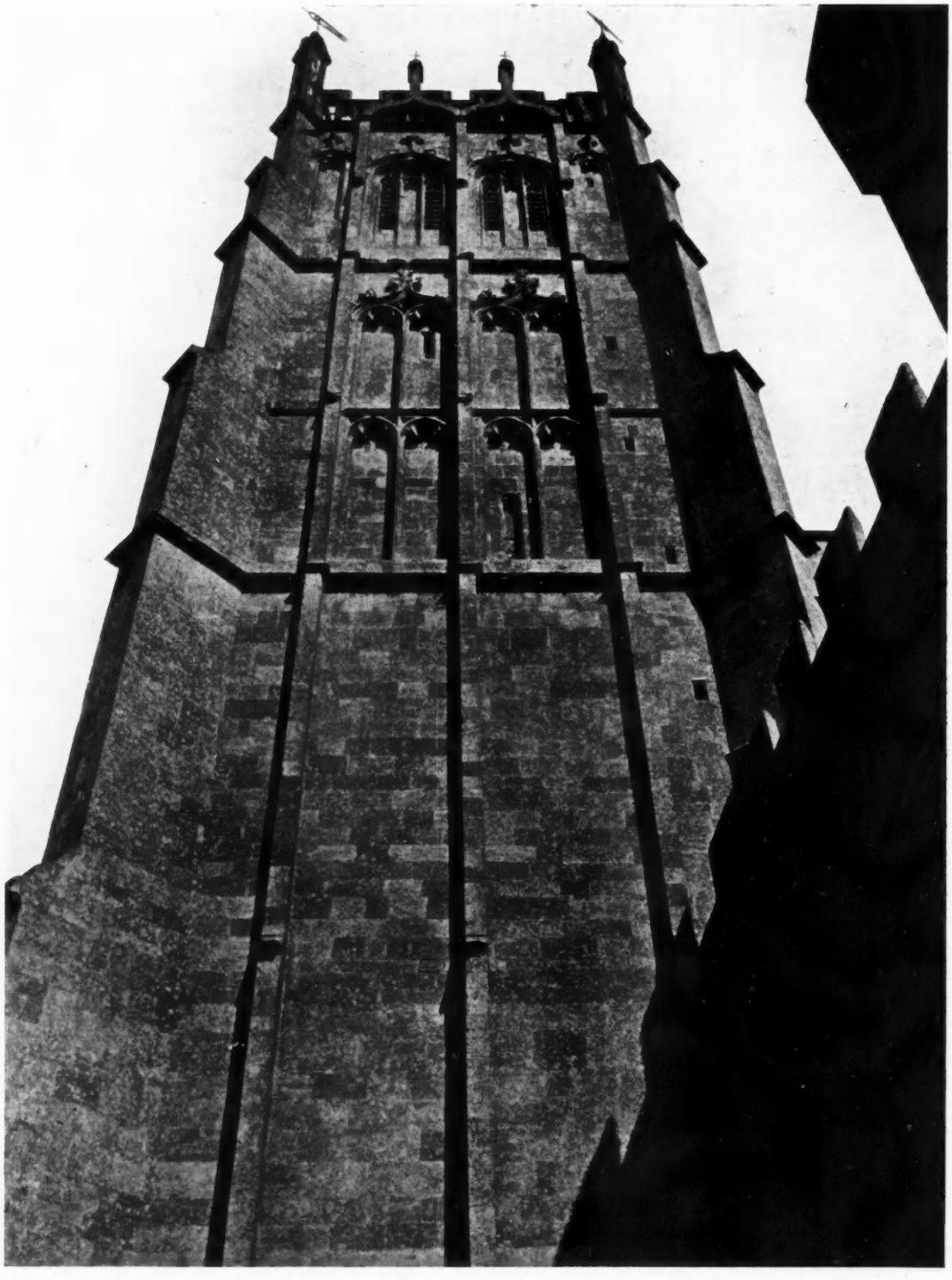
L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last date for entry for R.I.B.A. Final Examination.

THURSDAY, NOVEMBER 14

THE ARCHITECTURE CLUB. Dinner at the Savoy Hotel.

FRIDAY, NOVEMBER 15

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. "Romance of Lead in Industry." By Mr. E. Holden, F.COLL.H. **3 p.m.**



A STRAIGHT GREY PATH TO THE GLOWING COLOURS OF THE MEDIEVAL HEAVEN.

This tower of Cotswold stone has a compelling verticality far richer in majestic intention than many a streaming spire. The splendour of its ascending lines and the manner in which they have been emphasized render it distinctive among West Country churches. It stands at Chipping Campden, and it is built on the scale of a cathedral, recording the time when its quiet Cotswold village, where four centuries rub shoulders architecturally, was a town full of pride and prosperity.

THE ARCHITECTS' JOURNAL



WEDNESDAY, SEPTEMBER 11, 1929

THE HONEYWOOD FILE

"No true picture of men and affairs in the intricate relations imposed by the business of building a house can be otherwise than amusing."

THE series of articles or, more exactly, the serial, which is resumed in this issue, has attracted such wide attention and brought so many letters of appreciation from readers that we are led to think that an enterprise which editorial discretion originally described as adventurous, has set up a new principle in educative writings on professional practice, and pointed the way to methods of exposition which would give to treatises and dissertations on building the informative value they so much lack. This principle is, we think, bound up in the answer to the simple question: "What is the inquirer's true need?"

The way in which the author of The Honeywood File has answered that question has depended upon an equipment which is unusual in writers on technical subjects, and upon an unscrupulous deed of violence to a rule which is sanctified by custom and honoured by time; but in essence the answer seems to be that the inquirer's need is that his imagination should be quickened so that he may inform himself by mental images simulating actual experiences, and that he can be so informed not by abstract statements but by concrete examples. We may suppose, for instance, a comprehensive treatise to have been written displaying the architect's responsibility to the client, the builder, the public, and to himself, and yet the impression the work would leave upon the mind of even a reader who had equipped himself for test by examination from its pages would be rather of an enlarged capacity for using his head than of any knowledge of how to use it; he would, we think, be less completely and usefully informed for the purpose of engaging in practical issues—and certainly much less confident and efficient—than one who had read the section of The Honeywood File which deals with the episode of the digging of certain trial holes and describes the difficulties and disasters which attended that affair.

The narrative not only gives the true colour of life to the wayward and capricious trend of events; but the reactions of personalities to those events and upon each other are displayed with great fidelity and vividness, so that the amusing details of the adventure are made to comprehend, one might almost say, the whole field of an architect's obligations, and clearly to exemplify the precariousness of the position in which the responsibilities of his office place him. We are inclined to think that any young architect who reads that episode would be well informed without any effort of memory, for the author has a knack of making himself memorable. The picture left in his mind would lead him to be wary in just those matters and in just those ways in which wariness will protect him from mishaps.

The unscrupulous act, above referred to, by which the author has helped his purpose is no less than the destruction of that rule which binds all who deal with technical subjects—the unyielding rule of solemnity. Solemnity, we think, to be the deportment by which dignity is recognized, and dignity fortified by a little dullness, or a great deal, has come to be recognized as the due of treatises and dissertations on technical subjects.

All learned societies are dull, for if they were not dull they could not be solemn; and if not solemn they would cease to be dignified and fall under suspicion of not being learned. Few persons can be learned; but as dullness is the accepted mark of erudition and all can be dull, dullness rules.

The Honeywood File, however, is not dull; but the usual ascription that a writer on a technical matter who is not dignified is clearly no authority on his subject, but an interloper and a charlatan, cannot, we think, be here admitted. No true picture of men and affairs in the intricate relations imposed by the business of building a house can be otherwise than amusing, and no observant comment on the comedy of conflicting ambitions could fail to provoke smiles. It seems to us that the hilarious attractions of The Honeywood File are no mark of the author's levity, but rather a proof of his discernment.

NEWS & TOPICS

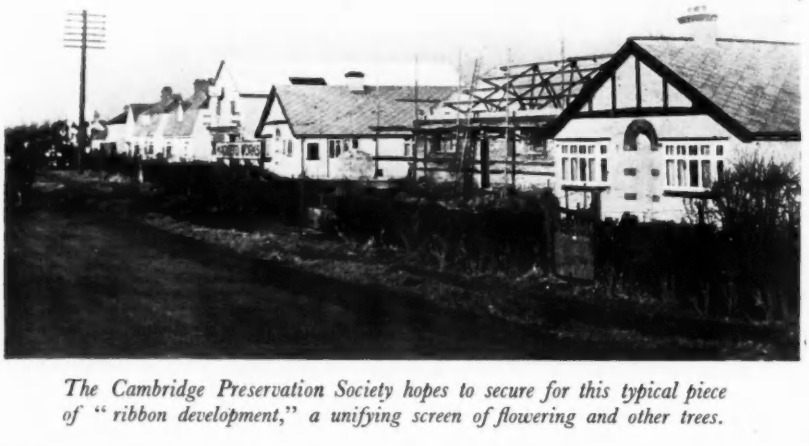
THE LATE GEOFFREY SCOTT

COLONEL RALPH H. ISHAM, the enthusiastic American Boswellian and lucky possessor of those recently discovered *Private Papers* of the great Scottish biographer which Geoffrey Scott was engaged in editing at the time of his death, has published some of his reminiscences of the author of *The Architecture of Humanism* in the New York *Saturday Review of Literature*. The circumstances of his meeting with Scott were romantic enough in themselves. Late in August 1927 Colonel Isham returned to London from Ireland with his precious acquisition. Lunching that day at Simpson's in the Strand, he chanced to run into a friend, also a keen Boswellian, to whom he confided his good fortune. This fellow-American immediately pronounced Geoffrey Scott the one and only man fitted to edit the *Papers*. With characteristic American rapidity of judgment Colonel Isham had no sooner heard this suggestion than he decided that Scott would, indeed, be the ideal editor, and that Scott must be made to undertake the task. Both were aware Scott had admitted to his friend, Mr. J. G. Wilson, the London bookseller, that he had done practically no work on his projected *Boswell* for *The English Men of Letters* series since learning of the existence of these same Malahide papers. But where was Scott to be found? The two friends believed that Scott was still living in Italy. Two days later Colonel Isham felt "a sudden urge" to go and see Mr. Wilson, who informed him that Scott had left the shop less than a quarter of an hour. The telephone effected an introduction, and Scott dined with Colonel Isham the same evening. The two sat up examining the papers all night. In the late dawn Scott went home for a change of clothes, but was soon back again at Claridge's Hotel, where Colonel Isham persuaded him to share his suite. The two became inseparable. When Colonel Isham sailed for America in mid-September Scott accompanied him as his Boswellian editor, and on their arrival went to live with him in his home on Long Island. Starting about ten he would write on, when the secretaries to whom he had been dictating all day had left, up to the last few minutes before dinner. After dinner he almost invariably continued work in the library until the small hours of the morning. After twenty-one months' intensive labour he had established the whole text, completed the first six volumes of the *Papers* (the last of which has just been published), and planned out the sequence of the remainder. He then went back to Europe for a couple of months' holiday. He returned to New York on August 4 in excellent spirits as a result of having arranged for the publication and serial rights of his long-deferred *Life of Boswell*, on terms which proved how highly the world had learned to value the word-painter of *The Portrait of Zélide*, and apparently in the best of health. On the seventh he suddenly fell ill with pneumonia. After a week's plucky struggle, he lost consciousness and died in the Rockefeller Institute on August 14.

"Geoffrey Scott's death," Colonel Isham says, "has brought a sense of desolation to his friends. They have lost a rare companion. The world has lost a genius"—a genius whose finest utterance it was that the quality we call dignity in architecture (and, he might have added, dignity of style in any medium of art) is really the same thing as dignity in character. Had he been more of an architect in stone than an architect in words, no juster epitaph could be found for him. But as it is, it will serve as well as another.

BILL POSTERS AND RURAL PRESERVATION

Signs are not lacking in sometimes unexpected quarters that the preserving of natural beauty is already regarded as a sound investment. Moreover, it is interesting to note among the list of subscribers to the Cambridge Preservation Society the name of the Cambridge Billposting Company. That surely augurs well for the Society's protective activities concerning views, field-paths, and pleasant open spaces. Much of the energy of the Society is naturally directed towards the care for sites which, in the words of their leaflet, *Cambridge*, should be "preserved from the builder." The phrase sounds perhaps a little unfortunate, and something of a deterrent to public-spirited builders who might follow the lead of the billposters. But there are "builders" and builders, of course, and the Council for the Preservation of Rural England has made it clear that building as such need not be the foe of rural preservation, but even its ally, just as building in the past joined hands with rural industry to make our unspoiled country villages the beautiful and harmonious compositions that they are. But building crimes are, alas! still too frequently committed today for the alliance to be perfected yet awhile. The Cambridge Preservation Society hopes, however, to conceal the evidence of some of the crimes already committed around Cambridge, by means of a "unifying screen of flowering and other trees," and thus, so far as may be, to hush up the horrors of local ribbon development.



The Cambridge Preservation Society hopes to secure for this typical piece of "ribbon development," a unifying screen of flowering and other trees.

A BEAUTIFUL ROW OF COTTAGES

My friend, Mr. J. D. M. Harvey, has allowed me to print on this page his drawing of what is surely one of the most beautiful rows of cottages in England. It is to be found at Sidford, a village lying athwart the Honiton Road, a mile or two from Sidmouth in Devon. The chief interest of Sidford consists of these cottages—cream-washed and thatched which line the roadside. Their fine chimneys, one discreetly flint-patterned, stand on guard, sentry-like, over the care-free fenestration and serve to punctuate the horizontal unbroken calm of eaves and ridge. The simple line of front ripples ever so delicately, and the severity of the whole is softened by centuries of familiar use. A tarred base gives stability, and the strip of flint paving in the front subtly connects the life of the cottages to that of the road which was their *raison d'etre*. They stand—or should one say stood?—a dignified rebuke to certain outposts of suburban Sidmouth which pepper the surrounding heights. It is almost unnecessary to add that the continuation of the row constricts the road slightly at one end and that it is faced by a selection of Victorian and later villas and shops. These are remote, not to say shady, architectural affinities and are replete with all cast-iron embellishments. The whole is of that choice brand of ugliness which is more lasting than bronze and which an ironical fate insists on preserving at the expense of surrounding amenities.



A row of cream-washed and thatched cottages at Sidford, Devon: one of the most beautiful in England.

*

THEORY AND PRACTICE IN STEEL STRUCTURES

Practice not infrequently gets out of step with theory, in constructional work as in other branches of engineering, hence the necessity of a periodical review and adjustment. An investigation into the design of steel structures and the application of modern theory of structures is now deemed to be due, according to a decision of the Department of Scientific and Industrial Research. Representatives of the department, the Institution of Civil Engineers, and the British Steelwork Association are to form a committee under the chairmanship of Sir Clement Hindley, with the object of 1: reviewing present methods and regulations for the design of steel structures, including bridges, and 2: investigating the application of the modern theory of structures to the design of steel structures. Recommendations are also to be made for the translation to practice of such of the results as appear to lead to more efficient and economical design.

*

Although this may foreshadow modification of existing regulations—for regulations have a way of lagging behind both theory and practice—it is not a matter of immediate concern, since the work is anticipated to extend over four years and will include full-scale experimental work, for which facilities are to be offered by the British Steelwork Association. The Building Research Station and various universities will also contribute, while the Director of Building Research is to act as executive officer to the committee, with a view to facilitating the carrying out of the experimental work. Half of the cost will be borne by the British Steelwork Association, which includes practically all the makers and rollers of British steel, and their contribution will be £2,000 for five years. The Department of Scientific and Industrial Research will bear the other half of the cost, so we may hope that from time to time as information of value becomes available it will be made public in the interest of industry generally, quite apart from the issue of a final report and recommendations.

*

REGIONAL PLANNING FOR THE WHOLE REALM

It is, as Mr. Clough Williams-Ellis pointed out in a letter to the *Times* recently, only obligatory town and regional planning for the whole country that can save for the South of England, over which industry is rapidly extending its tentacles, her amenities. "We wondered whether we should manage things any better than had our grandfathers," he says. ". . . That doubt is now at an end." It is of the utmost importance that co-ordination of purpose and planning should be realized throughout the realm without exception and without delay. At present, while one region may present the acme of æstheticism, its very neighbour can—and will, without the desired restriction—adhere to go-as-you-please backyard desolation.

ASTRAGAL

The Abbey Sacristy

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—My committee wishes me to thank you for the energetic stand you are making in regard to the proposal to build a sacristy on to the Abbey at Westminster.

I should like to take the opportunity given to the Society by your interest in the matter to make one or two statements in regard to the Society's view on this subject, which is sometimes misunderstood by architects.

The Society does not object to an addition to an old building when it can be shown that the advantages resulting from it are greater than the loss to the building itself. The Society is well aware that it is extremely difficult to balance one against the other, for in many cases the advantages to be derived from the addition are purely economic, whereas the disadvantages that the old building suffers are æsthetic and archæological, and it is a well-recognized difficulty of life to adjust human desires to the sometimes conflicting but valued abstract realities of beauty, virtue, and poetry.

After very careful consideration my committee has come to the conclusion that in this case the just balance of the forces is strongly opposed to the addition of the sacristy on any site against the walls of the Abbey church. It realizes that a sacristy is required, however, and urges, as it has ever urged, that the less convenient though accessible site of Westminster School Gymnasium and St. Dunstan's Chapel be made available for the purpose.

A. R. POWYS [Secretary],
The Society for the Protection of Ancient Buildings.

PRAGUE BRIDGES

BY KINETON PARKES

PRAGUE, so many centuries the capital of the ancient kingdom of Bohemia, now of the new nation Czecho-slovakia, is cut in twain by he Vltava river, lately known as the Moldau. Roughly, the old city exists on one bank, the new town on the other. But there was always a bridge, even if it was destroyed now and then by flood or by war. The Bohemian King Charles IV built the bridge which still bears his name and which is one of the finest features of a city as crowded with interesting architecture as any in Europe. It cost two and a half million francs to restore in 1890; a necessary expenditure in view of the growth of Prague and its rapidly increasing commercial and industrial importance.

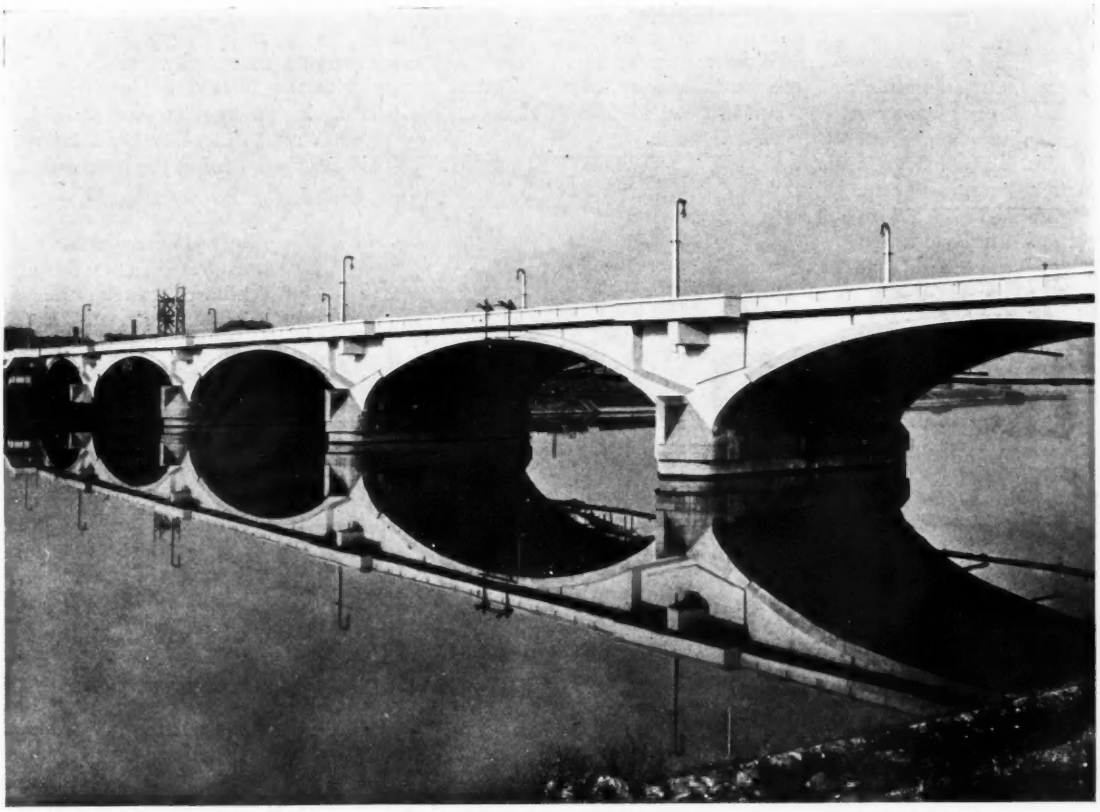
In 1846 the new era of bridge-building in Prague began, and in 1850 the two-way viaduct over the Vltava by the Swiss engineer Negrelli, connecting Holešovice with the State railway lines, was finished. This bridge, 1,100 metres in length, was supplemented in less than twenty years by a neo-Gothic English suspension bridge on chains (which have subsequently been replaced by cables) at the end of the thoroughfare called Revoluční třída in 1897. This has a central span of 150 metres and two side spans of 50 metres each, and is called the Ordish-Lefèvre. These are works of engineering rather than of architectural art, for art was apt to be overlooked in Europe during the unfruitful years of the mid-nineteenth century. But a different occasion from those of industrialism determined the commencement of a new era in which art should not be forgotten: art as the servant of industrialism. The occasion was the commemoration of the great Czech historical writer and politician, Frantisek Palacký, after whom the bridge was named. It connects the new part of Prague with Smichov. The bridge is of stone and has seven fine arches varying from 27 to 32 metres in width. The sculpture, by Myslbek, consists of four groups placed at the approaches to the bridge by the Palackého nám and Palackého trída. They are representative of Czech sentiment which, at the period when the bridge was built, 1876-78, was beginning to gather in strength, as though to forearm for the great struggle which was to take place some forty years later.

In another twenty years' time it was found necessary to replace a suspension bridge of no account by one of eight stone arches similar to those of the Pont d'Alma at Paris. The arches are 42 metres across, and the bridge, called after Francis I, is 340 metres long, and was erected at a cost of over 4,000,000 francs. This has since been supplemented by an ugly iron railway bridge near Vyšehrad, which has three 72 metres bowstring girders and does not improve the view of the river. In 1905 the Svatopluk Cech bridge, named after the Czech poet, was built with three rigid metal spandrils of 48, 53, and 59 metres length, respectively. This concludes the bridges of the past. The new post-war era opens more hopefully than the old seemed to promise. In order to give expression to the feelings of the new age it was necessary to clear the ground of old prejudices. Wood, stone, and iron had been the accepted materials for bridges during the ages. Medieval and Renaissance styles were the only alternatives to engineer work. Something had to be done; some new factor had to be introduced. Concrete came, was seen, and—conquered.

There are three new concrete bridges over the Vltava.



Charles IV Bridge, Prague. It is one of the finest features of a city as crowded with interesting architecture as any in Europe.



The Holešovice-Liben Bridge, Prague: the latest example of the engineering skill of Mencl and the architectural co-operation of Janák. It has five arches of from 28 to 43 metres of compressed concrete, the façades being covered with artificial stone. It is 21 metres wide, the widest of all the Prague bridges.

The most important is the Hlávka bridge, named after the celebrated Czech architect who erected several important buildings in Prague during the later years of last century. It is in two parts, the first over the river having three arches of 39 to 36 metres length, the second over the Velké Benátky island of four sections of about 18 metres span, with an arch height of 7 metres. The river arches are settled on the rock of the river bed, and consist of unreinforced concrete linked by lead plates inserted between granite blocks. A decorative touch is supplied by the relieving arches over the piers. The parapets are cantilevered, giving a total passageway of 16 metres. The arches are oblique, which fact facilitated construction, each one having three zones of six large voussoirs, each zone being concreted in four or five days. The design of the bridge and its engineering are the work of F. Mencl, chief engineer of the Prague Municipal Commission of Public Ways, and the builder was K. Herzan. The architect is Pavel Janák, well known as one of the most accomplished of the new Czech artists; and the sculptor in chief was Jan Stursa, a great plastic artist who, most unfortunately, died in 1925.

The piers, of 1:8 concrete, are 4 metres wide faced with dressed granite with ashlars. The smaller arches are irregular and the piers are not parallel, and the down- and up-stream openings vary therefore. The construction in concrete was found to be



A sculpture group, by Myslbek, at the Palacký Bridge, Prague. This and three other groups are placed at the approaches.

much easier than in stone. The material is reinforced by iron rods 15 centimetres apart, and the crowning thickness is 35. Most of the foundations are on wooden piles. The lamp standards and the masts which carry electric current are of concrete, and beneath the roadway are further cables and gas and water mains. The bridge is 203 metres long, and the surface has been finished with a layer of finely-crushed marble - concrete and left rough, the lower portions of the arches squared. The foundations were begun in April 1910, and in October the first ramming was effected. The columns were finished in the following May, the arches being rammed in sections during July and August, each section occupying only a single day.

The sculpture of the Hlavka is remarkable, rivalling that of the Charles IV and Palacky bridges and the various displays of modern sculpture in other parts of Prague. Stursa's two great figure groups of "Humanity" and "Labour" are placed on the pylons of the toll-houses on the Bubny end of the bridge and are carved in Bohemian sandstone. Architect and sculptor collaborated in this work, and the modified pyramidal form was selected as the basis of the symbolism of the figure design. The sculptor subordinated all considerations to the architectonic The slopes of the sides of the pylons suggested the counterpoise of the groups; the outline was carried through, and the plastic imagination was devoted to maintaining a silhouette in keeping with the whole constructive plan. With true glyptic insight all protuberances were restricted, and the massed figures preserve a thoroughly compact design.



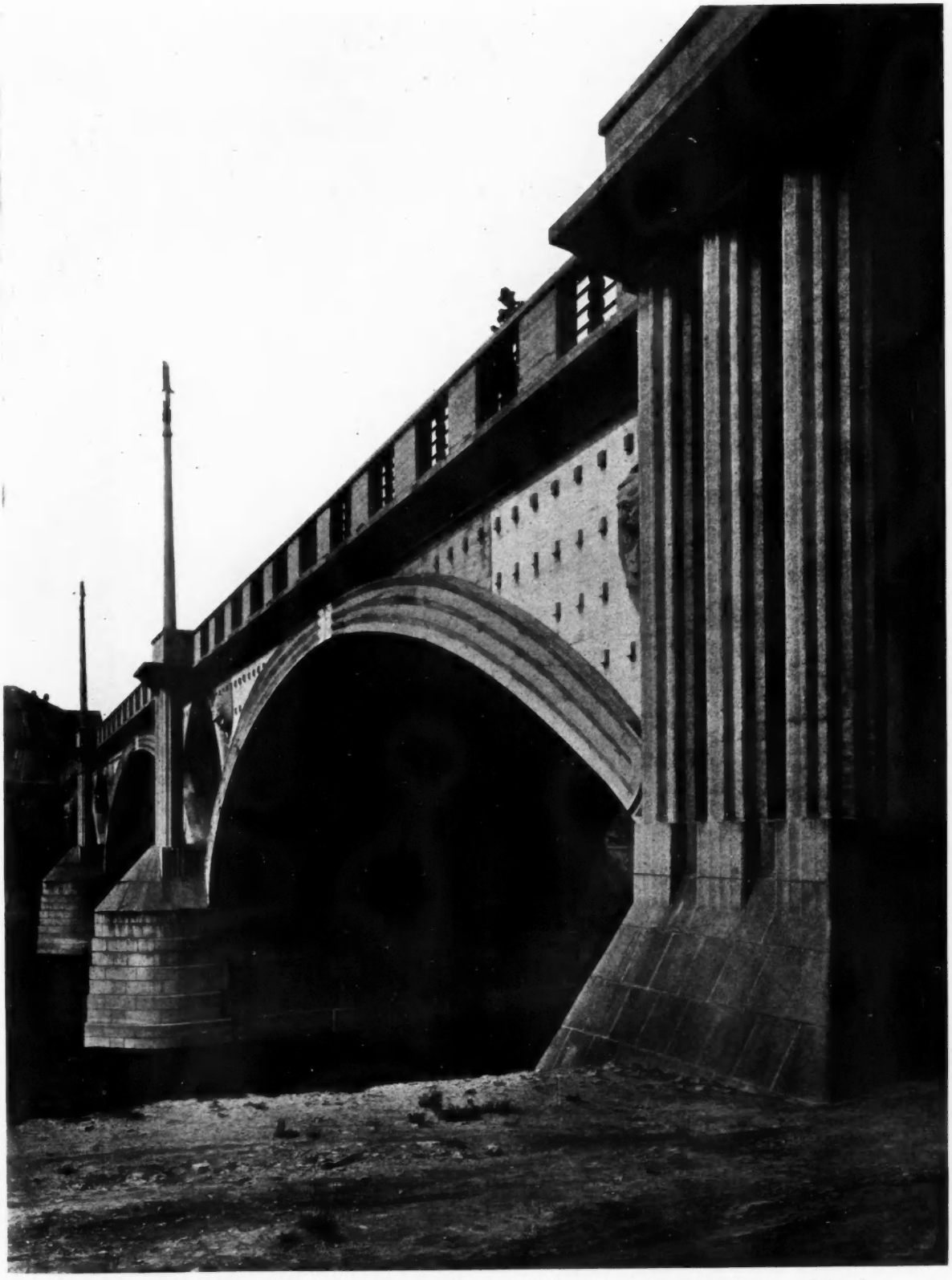
"Labour," a group in Bohemian sandstone, by Jan Stursa, on the Hlávka Bridge, Prague.

Contemporary with the Hlávka bridge, an interesting piece of engineering in concrete is the footbridge with sluice and enclosures containing the mechanism of the river locks at Poděbrady. Characteristically, the architectural feature has been well exploited in the form of open pillared towers, the work of Antonin Engel. Another is the new Troja bridge, of a progressive nature, for it has a central arch of 55 metres of reinforced concrete rib construction. The latest example of the engineering skill of Mencl and the architectural co-operation of Janák, a union of forces now taken for granted in Czechoslovakian bridge-building, is the Holesovice-Liben bridge. This is a very pleasing, graceful erection consisting of two parts, the one on the left of the river being now completed. It has five arches of from 28 to 43 metres of compressed concrete. On both sides of this section there are stairs leading to the Lower Embankment. It is 21 metres wide, the widest of all the Prague bridges. The façades of all the outer concrete parts are covered with a layer of artificial stone. The oblate-spherical shape of the arches is very successful.

The ten bridges of Prague undoubtedly add to the city's river vista and enhance the view, rendering it a serious rival to that of Budapest.



Hlávka Bridge, Prague. F. Mencl engineer, P. Janák architect. The sculptors were Stursa, Kafka, Kofránck, Gutfreund, and Maratka.



Hlávka Bridge, Prague. The river arches are settled on the rock of the river-bed, and consist of unreinforced concrete linked by lead plates inserted between granite blocks. A decorative touch is supplied by the relieving arches over the piers. The parapets are cantilevered, giving a total passageway of 16 metres.

THE "BULL AND BUTCHER," WHETSTONE

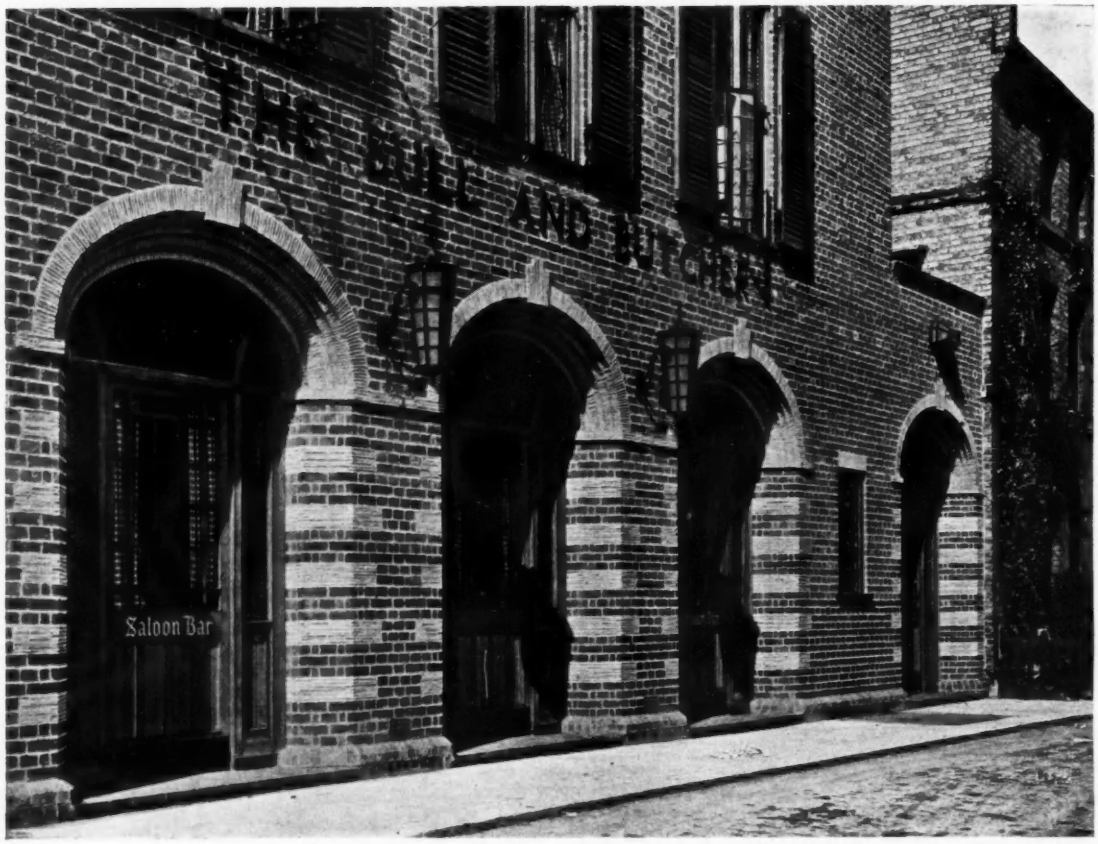
DESIGNED BY E. B. MUSMAN

AMONG the many changes which are being made in familiar landmarks in our streets it is interesting to find that the leading brewery companies are striking the keynote of the day in providing in their new houses pleasing surroundings, with a fine sense of order, space, and comfort which is replacing the old garish note of discomfort, chaos, and general gimcrack hideousness.

In the rebuilding of the "Bull and Butcher" public-house at Whetstone, Messrs. Benskin's Watford Brewery, Ltd., set a problem which has been admirably solved by the architect, Mr. E. B. Musman, A.R.I.B.A. One is immediately arrested by the fine sense of dignity and repose in the elevation and setting of this building, which, although carefully linked up with the surrounding buildings, stands out among them and expresses its personality and purpose through its proportion, rhythm, and restraint.

An examination of the drawings shows a cleverly conceived plan giving excellent service and supervision, and throwing open to the public well-lighted, pleasant, and comfortable rooms. Each individual has been remembered. One may enter the house without going into the bars, and ascend to the club-room and restaurant; and if one would play billiards when the bars are closed, the billiard room with its accompanying lavatory accommodation is a self-contained unit which may be approached direct from the street.

The well-proportioned and excellently detailed elevation to the High Road, with its delicate cornice, its well-designed inscription and lamps, prepares one for an interior treatment of a high quality. Outside and in one is conscious that everything has been considered and each problem solved. Although restraint is evident in the handling of the whole scheme, the cabinets, counters, and lighting are full of interest and originality.



The main entrances. The walls are faced with multi-coloured rustic bricks of pleasing texture and colour, and with tile dressings and arches.

Oak is used for the panelling to the billiard room and private bar, and for the whole of the cabinets, and Oregon pine for the saloon bar panelling. The public bar is tiled.

The excellent choice of materials is again evident in the elevations. Multi-coloured rustic facings of pleasing texture and colour with tile dressings and arches lead the eye up to the roof where the fine old tiles from the original house have been re-used with an intermingling of red sand-faced tiles.

A. B.

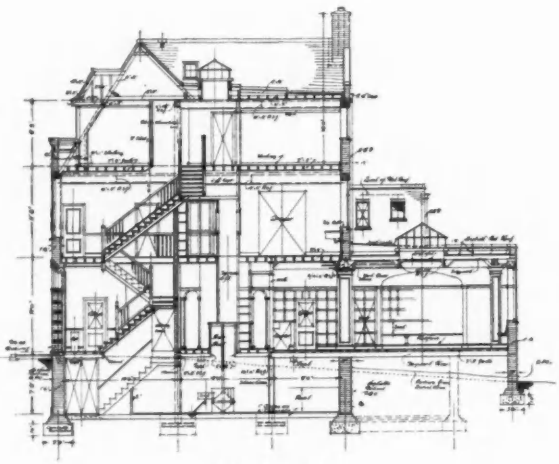


"Although carefully linked up with the surrounding buildings, the 'Bull and Butcher' stands out among them and expresses its personality and purpose through its proportion, rhythm, and restraint."

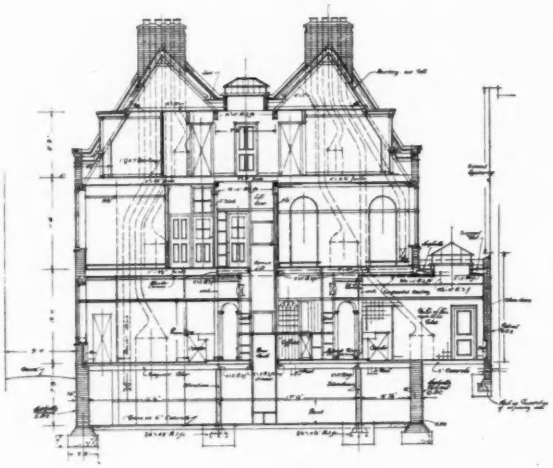


The "Bull and Butcher," Whetstone.] [*By E. B. Musman.*

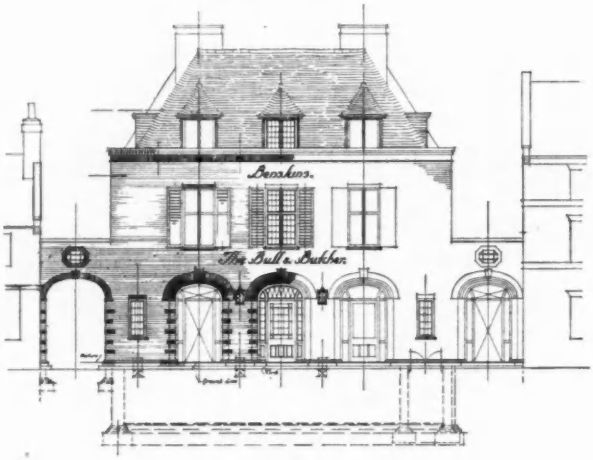
The saloon bar. In planning the building the architect has aimed at providing excellent service and supervision, and well-lighted, pleasant, and comfortable rooms.



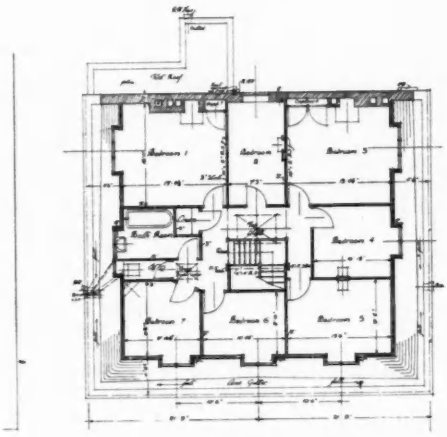
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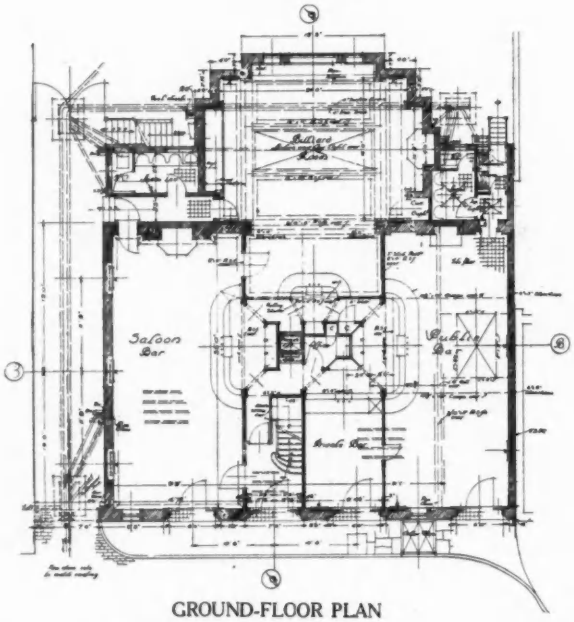
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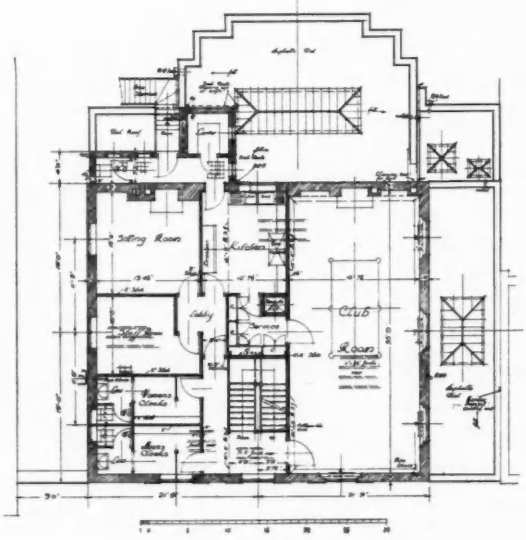
FRONT ELEVATION



SECOND-FLOOR PLAN



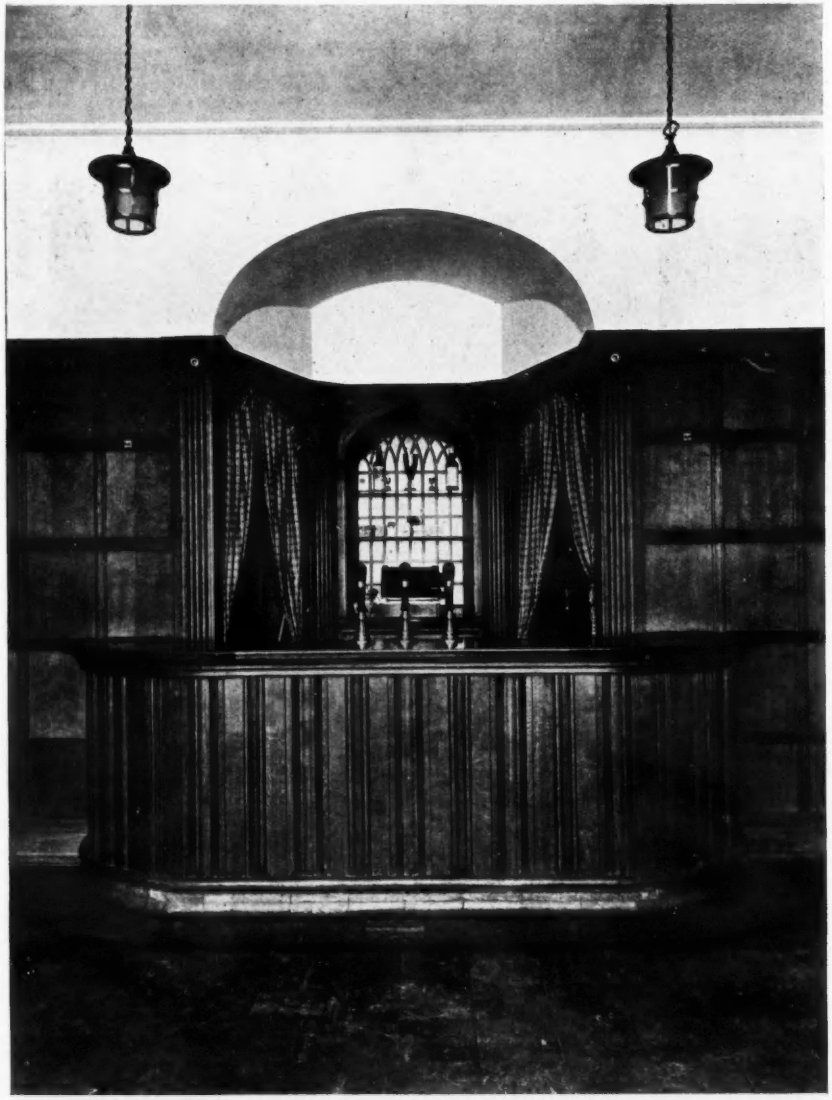
GROUND-FLOOR PLAN



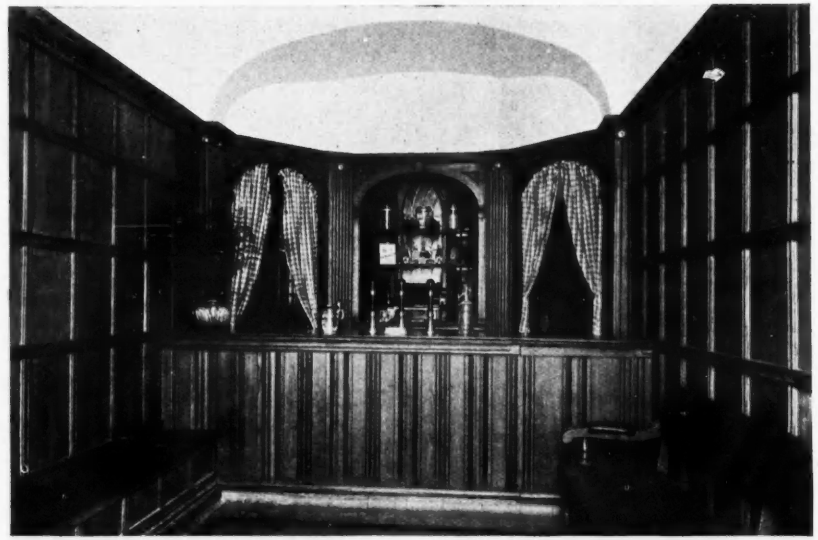
FIRST-FLOOR PLAN

The "Bull and Butcher," Whetstone.] [*By E. B. Musman.*

Plans, elevation, and sections. One may enter the house without going into the excellent bars and ascend to the club-room and restaurant; and if one would play billiards when the bars are closed, the billiard-room with its accompanying lavatory accommodation is a self-contained unit which may be approached direct from the street.







The "Bull and Butcher," Whetstone.] [*By E. B. Musman.*

Counter and cabinet in billiard room (left). The public bar, and the counter and cabinet in the private bar (right). Oak is used for the panelling in the billiard room and private bar, and for the whole of the cabinets. The public bar is tiled.

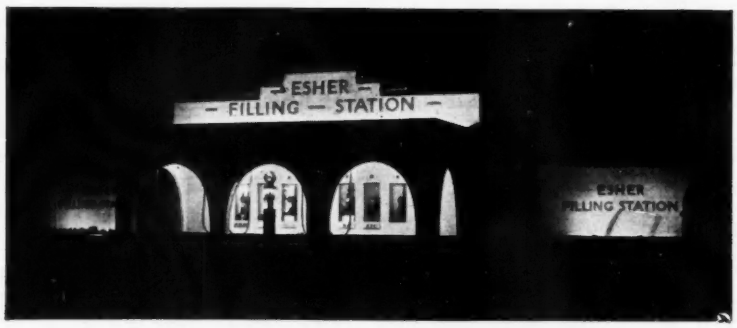
OIL- AND PETROL-FILLING STATION IN SURREY

DESIGNED BY IMRIE AND ANGELL

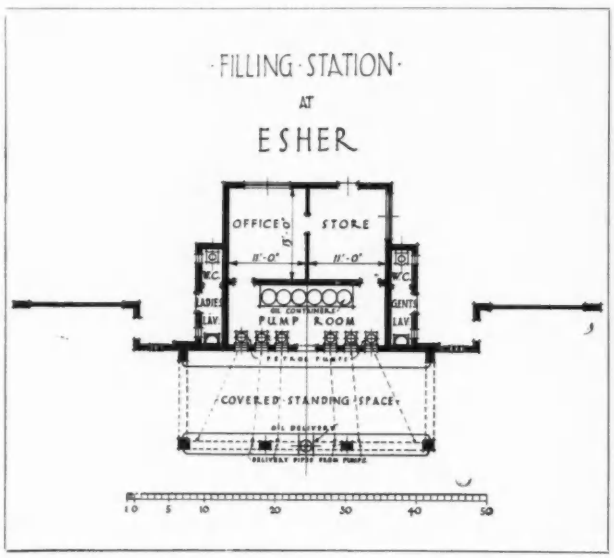


No pumps are visible from the approach: cars drive in under the covered arcade to pick up supplies.

Esher filling station was designed to the instructions of a client who required of the architects a seemly building, so arranged that neither it nor the apparatus should be a blot on the country-side, but yet looking as if it dated from 1929, not 1629. It is probably the first to embody the idea of completely masking the unsightly pumps. These are visible, however, for the purposes of inspection on the part of petrol - purchasers, through plate-glass windows. The covered standing-space admits of all filling being done under shelter from rain, etc.



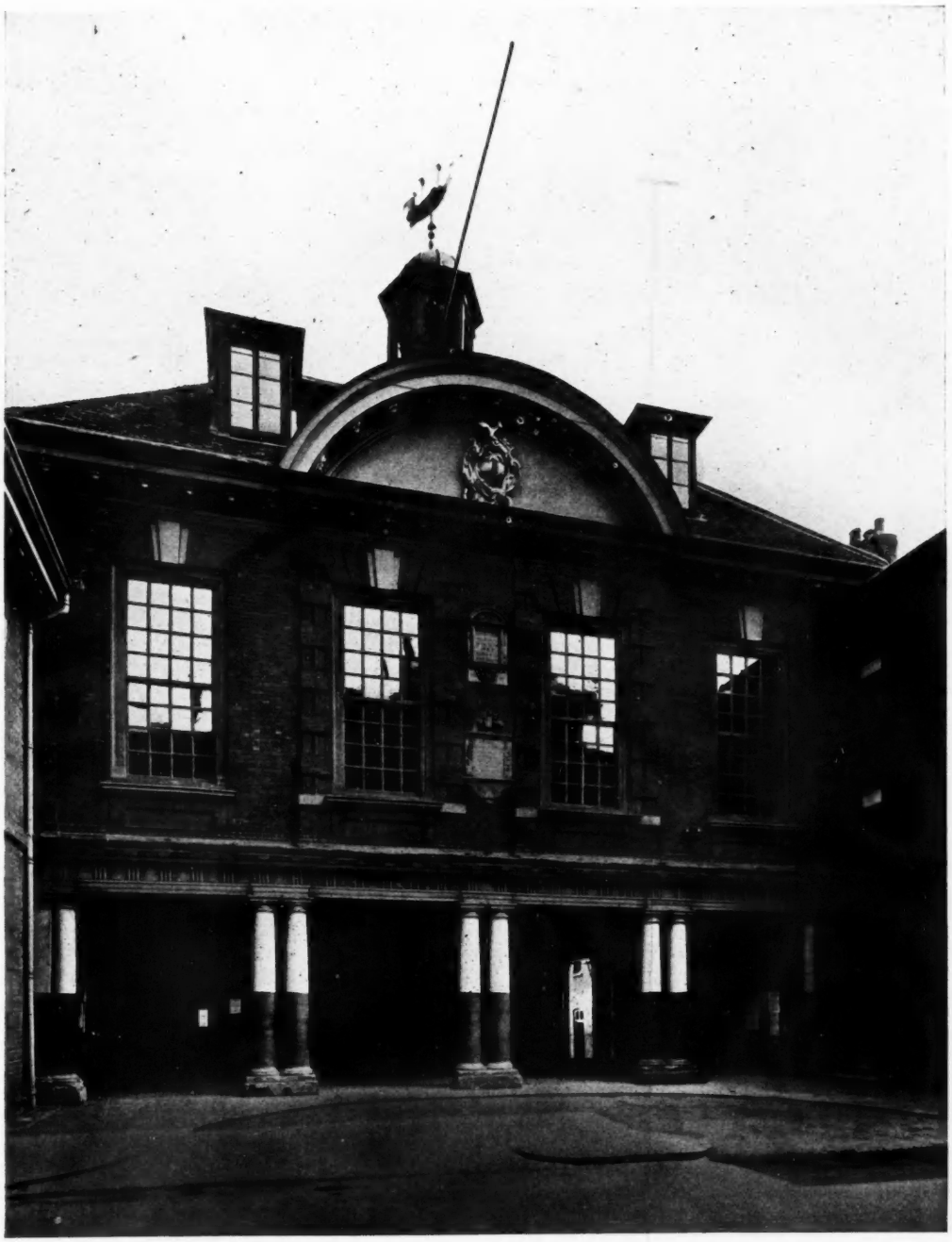
No "blinking" night-signs are needed to catch the passing eye.



Simple, symmetrical planning provides not only a pump-chamber, but an office, store, and two lavatories.



All the six petrol-pumps are housed within doors and show their dials to customers through windows.



ENGLISH PRECEDENT No. 81

THE GUILDHALL, ROCHESTER

This building, with its great sash windows and fine brickwork, has much in common with the work of Wren. Its defects of grouping, and the weakness of the supporting columns only slightly detract from the fine pompous grandeur of the whole.

The cupola is surmounted by a model of a full-rigged ship, intricately made in metal and completely gilded.

—[E. MAXWELL FRY.]

THE HONEYWOOD FILE

BY KARSHISH

The Editor is glad to welcome Karshish back to the JOURNAL *after his recent illness, which has interrupted his serial since June 26. The Honeywood File, although its characters and incidents are inventions, sets out to present the minutiæ of architectural practice as displayed in actual letters abstracted from an architect's correspondence files. To enable the reader to get clear impressions of persons and events the author has deemed it necessary that the colours of the picture shown should be somewhat brighter than life, but he engages not to depart from strict verisimilitude, and to make the picture a true one in all details.*

Interlude

After a banishment from my desk which has amazed me by revealing my vitality to be centred in the extreme upper bastions of my left leg, I have "re-perused"—as Sir Leslie Brash would say—those seventeen numbers of the Honeywood File that have already appeared in these pages; and as the memories of my readers will need refreshment at least as much as my own, I here set down the result of my exploration.

The Honeywood File is concerned with the erection of a house for one Sir Leslie Brash, an eminent accountant and financial expert, whose recreations are jocularly described by the person who introduced him to Spinlove, the architect, as "cursing and conger-fishing." His letters, however, show Brash as indulging himself only in the first of these relaxations.

The house is revealed to be a well-built, but not an extravagantly-finished, brick house. Externally it is of broken-coloured red bricks, with wide joints which Spinlove, for Brash's information, identifies with the Tudor tradition as exemplified in a famous mansion: but this scarcely describes its architectural style, for we hear of verges with undercloaks, oversailings, and dentils to eaves and window cills; and certain gables are designed with parapets. The interior is finished, apparently, in a free version of Tudor, for oak panelling and brick fireplaces are mentioned; and as the architectural game Spinlove would be at is an old game, and Spinlove is a new architect, we may judge that his elaborations are designed to express the likings of his client, Sir Leslie Brash. With the ground falling away steeply from a terrace along the south-west front, from which a fine prospect is viewed, and the house backing upon a plantation which shelters it upon the north and east and screens it from the public road, we readily picture a building which has the fitness to its surroundings of a natural growth and awakens the agreeable associations of the traditional English home. It seems, in fact, to be quite a good kind of house. It claims no extraordinary cleverness, and attempts no notoriety. There is nothing exotic about it and one could stare at it for a week without Corbusier ever coming into one's head.

James Spinlove, A.R.I.B.A., has been in practice for some five years, and "Honeywood" is by far his most important commission. His technical attainments and natural capacities appear to be first-rate; for, after extremely awkward jangles over preliminary sketch plans and estimates owing to Brash expecting to get a twenty-thousand pound house for ten and demanding impossible plan arrangements, which even involved going up the back stairs and down the front to get to the entrance door, Spinlove reduces him and Lady Brash to such ecstasies of enthusiasm and delight with his final sketch designs that he is asked to restore most of the amenities which, on the ground of cost, he had before been told to cut out. These jangles, however, become at one time ominous owing to the self-importance and ignorance of Brash; the nervous solicitude of Spinlove, and the querulousness of Lady Brash, who nearly upset the apple-cart because the chimney of a pumping station two miles away might be visible from the windows. I observe that both the chimney and the lady are still on the scenes.

Spinlove's inexperience of men and affairs; his high elation at his opportunity; his complete lack of humour (which Brash shares), and his want of ordinary tact and social gumption, have much to do with these early difficulties: his touch is too heavy, and he goes boring down into the depths of every misery, so that I was moved by one of his stupidities to call him a "devoted ass." He is, however, an estimable fellow; an artist, as one judges, and certainly an enthusiast. I like Spinlove, and regret the way in which he is repeatedly caught out by small omissions in forethought or defects in his organization. It was a misfortune that he should get into such a mess over his order for facing bricks; and he is not out of the mess yet, although he thinks he is. I imagine, too, that no architect ever experienced such blank consternation and misery over the letting of a contract than did our friend James when he got the telegram withdrawing the accepted tender; but his worst misfortune was when he so organizes the digging of trial holes that he not only makes himself responsible for the loss of a valuable mare belonging to Brash's daughter, which blundered into one of them and had to be shot, but becomes liable for the cost of digging the holes as well.

He gets into much trouble, too, owing to his dictatorial methods with those whom he has to direct; and particularly in his dealings with that capital fellow Grigblay, the contractor, whose tact, humour, good sense, and wisdom—typical of the old-established provincial builder—are an enormous advantage to Spinlove, though he rarely seems aware of it. Spinlove's success in dealing with the awkward predicament of water supply, and his skilful flattening out—for the time being at any rate—of that mischievous fellow Potch, the district surveyor, were due to the good advice and friendly hints of Grigblay. Spinlove is also fortunate in being able to ask advice from his friend, William Wychete, P.P.R.I.B.A., from whom he receives wise direction at more than one awkward conjunction.

As for Sir Leslie Brash, the client, it is no good my pretending I like him, for I do not. I wish I did, but he is not my sort. That is not fault of his. He seems to be a thoroughly good-hearted man, and even generously minded—as his treatment of Spinlove over the trial holes, when he lost a valuable horse and became involved in solicitor's charges, and in the matter of the contract muddle, and in his frank surrender of his opinions on several occasions, all show—but the pomposity which gained and sustains his knighthood, the absurd snobbery of his social aspirations, and the genteelisms and tautologies and affected elegancies which serve only to sublime his ignorance, set my teeth on edge. He appears to be close in money matters, I am sorry to notice.

We do not see much of Lady Brash, but Spinlove is evidently afraid of her, and probably with good reason. She

does her sex scant justice in being extremely silly, and she is probably neurotic and, certainly, spoilt. As she shows herself to be more ignorant and a bigger snob than her husband we may conclude she is a loyal wife, and that is the best I can see in her—so far. She has a daughter, it seems, but we only hear of her as hunting and playing ping-pong and lawn-tennis, in which last " pastime," as Brash calls it, Spinlove has once or twice been invited to join her and her friends.

Of Bloggs, the foreman, we get happy glimpses. Like his master, he is one of the old school. He is a sterling, practical man; probably rather slow and thick in the head, and owing his rise from working to general foreman, not to initiative and organizing capacity, but to his ability to write and figure at a time when those accomplishments were not general; for I judge Bloggs to be a man of sixty who has been devoted to his master's interests for, perhaps, forty years. I see in Bloggs the sort of Briton who will hang on blindly like a bulldog, come what may.

We will now open the file where we were interrupted and see what follows; in which adventure I am nearly as much in the dark, and quite as interested, as anyone else.

No. XVIII. Spinlove Up, and Spinlove Down

It is July. The walls of the house are up to plate level and the carpenters are preparing to start on the roof. Sir Leslie Brash, the client—by what James Spinlove, the architect, regards as an infernal dispensation—has, with his wife and daughter, rented, for the summer, a furnished house, " Roselawn," close at hand. Grigblay, the builder, and his faithful squire, Bloggs, the foreman, are pushing on with the work ; and Rallingbourne, the owner of the adjoining property, is on the horizon.

SPINLOVE TO GRIGBLAY

Dear Sirs, 7/7/25

I yesterday saw first delivery of roofing tiles, which are quite satisfactory, but I noticed no tile-and-half tiles for verges. The tiles are cogged, as well as prepared for nailing and, as on further consideration I do not think it necessary to nail the whole as specified, will you please nail every fourth course on south and west slopes only, and verges and eaves throughout. I have noted this as an omission.

Will you please let me know how you intend to mix the three different colours so as to give the " broken colour " tiling specified ? Patches of uniform colour must not show, nor must there be any appearance of arrangement.

I asked your foreman to build a yard run of eaves and verges with one of the kneeler oversails, all shown on drawing No. 27, for my approval. I also directed that the rafters should be lined up on plate and at ridge, but allowed to range a little unequally so that the finished surface of tiling will show undulations; and I also directed that the tiling battens should not run truly parallel, but vary ¼ in. each way, and the battens themselves be bent or " sprung " as necessary, so that gauge of tiles will *not* show in rigid parallel courses. Please give these matters particular attention.

Yours faithfully,

We may sympathize with Spinlove's solicitude and applaud his vision—although Grigblay is unlikely to do either—without necessarily commending the principles of the game he would be at. All architects who have the right salt acquire affections—or affectations—which they afterwards discard in favour of others, and we have no right to decide that Spinlove is either precious or silly because the immediate colour of his architectural creed may not be also ours. Spinlove has, clearly, lifted the idea bodily out of a book, for it would scarcely have jumped into his head in such complete detail ; and he has never tried to get the thing done before or he would not suppose carpenters and tilers to be ready, at a word, to do haphazard and crookedly the particular work which it is the pride of their skill and experience to perform by a rule of perfect exactness. He would also have known, had he before experimented in this way, that his demands upon the builder in these matters are intolerable.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 7/7/25

I enclose specification anent inserting pipes in ditch from Mr. Rallingbourne's surveyor. I understand you have signified your approval of the proposition and shall be obliged if you will direct Mr. Grigblay to proceed with the operations.

Lady Brash and myself are much gratified with the advance in progress and anticipate eventually moving into the house considerably in advance of the expiration of the contract period, as the chimneys are now completed and the roof commenced and little remains but the interior work. I inquired of Mr. Bloggs as to the signification of the flag I observed to be affixed to a staff on one of the chimneys, and as I ascertained that many of the workmen were addicted to total abstinence from alcoholic liquor, we arranged for a picnic tea to be served to them on Friday. Our hospitality, I gather, was greatly appreciated, and the event will, I trust, serve still further to expedite progress.

All our friends join with us in admiring the fine appearance the edifice is assuming. The effect promises a very pretty and charming residence when complete.

I beg the pleasure to enclose cheque for £250 on account of your fees.

Believe me,

Yours sincerely,

P.S.—I am requested to remind you that your anticipated presence for lawn-tennis is expected on next Saturday prox. Jump in to scruff and toe the line at 2 before the patters scrum starts, Woggles and Biff will be here, Snooty tried the tea-tray toboggan stunt backwards and is nursing her bumps, poor dear.

The last lines are in a hurried, bulgy hand so different from the body of the letter, that we may decide Sir Leslie Brash did not write them.

The pleasure Brash begs will find Spinlove begging. On May 25 Spinlove applied for £400 on account of fees, and now, after an interval of six weeks, Brash sends his architect £250 as a mark of approval and by way of encouragement. It will probably be a very long time, indeed, before Spinlove again has such an experience ; but if he continues many years in practice he will learn the reaction of the private client to claims for architect's fees—knit up, as it is, with personal relations and respective social standings and financial circumstances—is as varied as any other of the characteristics of which every individual is compacted. Broadly speaking, an architect who is reasonably competent and conscientious may, saving disasters, expect not only to have his b[ills] paid in full, but to be thanked for [his] services, but he may not always be paid [as] and when he expects. There are also sensitively honourable men and women who confuse the architect with the commercial agent, and who are taken aback at being charged for services which they have not made use of—such as advice, sketch plans, or even contract particulars ; and there are others who feel that they should not be called upon to pay for advice which has misled them, e.g. where contract particulars have been authorized under the architect's estimate and no tender near to his figure is obtainable. There are also men and women who are not sensitively honourable and who resist on principle all obligations, and who make unjust quibbling objections to the amount of both builders' and architects' accounts in confidence that the matter will be settled to their own advantage without recourse to lawyers. It is impossible to instance all the different kinds of treatment an architect may receive from private clients in the article of fees ; they cover every degree of meanness and of generosity which human nature knows. It is a fact that will appear odd only to those whose experience of men and affairs is slight, that trouble over payment of fees is most to be expected when the scale or amount of them has been particularly and exactly agreed

beforehand. The sort of man who bargains with his architect on the point of fees is precisely the sort who boggles at paying anything, and who will seek to interpret the understanding unfairly against the architect. This is the "shrewd, hard-headed" principle which is better admired at a distance than near at hand, although most architects obtain a close view of it sooner or later.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 8/7/25

Thank you for cheque. I enclose form of receipt.

There is a misunderstanding for which I may possibly be responsible. I gather from the amount of your cheque (£250) that you supposed I asked for payment on account of £400 fees, whereas I asked for £400 on account.

Please do not trouble to rectify. It will prevent all chance of confusion in future if I follow the established business custom and invoice architect's charges as they fall due for payment. I will take an early opportunity to get things straightened out on this footing.

Yours sincerely,

Spinlove is always at his best when his resentment is wakened and he forgets himself. He was evidently hurt, and composed his letter with the care which the task of being decorously venomous deserves. He pays Brash the compliment of assuming that the thing Brash has done is so unthinkable that a clear impossibility can alone be the explanation. Unless Brash has forgotten how to blush—and in view of his self-conscious aspirations to the genteel this is most unlikely—we may imagine him as growing pink when he reads his architect's letter. He will probably be thankful to avail himself of the fantastic excuse offered him, and it is difficult to see how, in the future, he is to avoid completing, with reluctant cheque book, the "formal business arrangement" which the solicitous Spinlove, entirely for his client's convenience, has promised to adopt. We need not, however, be hard on Brash; he means well. He sent his cheque, in fact, on an impulse of generous appreciation; but his activities have left him aware of little but his own importance and his own gain, and he knows no better than to behave in this way. Spinlove has taken a strong line, but, from what we know of Brash, it is justified and will be unlikely to do any harm. He was not merely entitled to make protest, but it was so necessary for him as to be almost a duty.

GRIGBLAY TO SPINLOVE

Dear Sir, 9/7/25

We note your instructions re nailing tiles. The tile-and-half bonnet and ridge tiles are on order. With regard to mixing tiles, specification calls for "broken colour tiling," from which we understood they would be supplied ready for hanging as they came to hand. The tilers will want more money, but we will have the three different kinds sent up in equal quantities and the tilers can be trusted to use them haphazard, as you wish, but we must ask you to set off this against omission of nailing.

We have directed our foreman to build sample eaves, etc., as you ask, though we were not prepared for this; and with regard to the other matters you mention, will do our best to meet your wishes, but we must point out that this is special work not covered by the contract, and we may have to claim an extra for it.

Yours faithfully,

If Spinlove had not launched out with his prescription for a sham medieval roof, Grigblay would not have been likely to comment on his other exactions. That comment is made, on principle, to remind his young friend, the architect, that a builder pays for his compliances in hard cash, and that favours should be sought and not demanded. In the circumstances, Grigblay is not unreasonable, and he evidently foresees that the stolid inertia of the carpenters and tilers will put the extinguisher on Spinlove's crotchety roof. He knows that they will listen respectfully to his directions for battening and tiling, while perhaps sharing a few winks behind his back, and then carry on much as usual. On a later day it will appear that the architect has not been understood; and if he is tenacious in his purpose, he will be asked questions he cannot answer and will be left to surrender the position either before provoking a mutiny, or after doing so. All this Grigblay perfectly understands. It is possible to build such a roof as Spinlove has set his heart on, but only with foresight and after careful preparation and with selected workmen.

(NEXT WEEK: THE DISTRICT SURVEYOR AGAIN)

THE HOUSE OF WILLIAM BRUCE

An Architect's Home

And Its Influence on English Architecture

Kinross House was in process of erection from 1685 to 1690. It was designed by Sir William Bruce, the great Scottish architect (? 1630–1710), and, being built for the family seat, it bears his arms, crest, and monogram in various places on the exterior. The illustrations accompanying this article are the first of a series which will comprise every detail of a house of outstanding architectural interest.

ENGLISH architecture of the second half of the eighteenth century is notoriously different from that of the first half. Between Inigo Jones and Paine the tradition flows with no interruption; the main current is not noticeably deflected. But in the year 1759 Robert Adam started work on his first building in England, and simultaneously another architect whose ancestry has been traced back to Aberdeen published his famous treatise on *The Decorative Parts of Civil Architecture*. Taylor was forty-five years old, Paine thirty-four, and Carr of York thirty-six. These men were the last of the Wren age, and between them and their successors there yawned a chasm across which Paine, the most distinguished of the three, glowered from his retirement with increasing disfavour and depression. Much has been written about the new school which so quickly and consummately took the place of the old. Its origin has been sought as far afield as Greece and Asia Minor, as China even, and on our own soil back to the Conqueror's century. Among all the causes of this important revolution there is, indeed, only one that has failed to receive the attention it deserves. Since the leaders of the new movement were mostly Scotsmen, one would think that the earlier architecture of Scotland might well have a share in the forming of those predilections they were so successful in imposing upon the English mind. What could be more natural, in trying to explain the architecture with which the Adam brothers captured London, than to examine the architecture among which the Adam brothers were born and reared to maturity? A growth so

vigorous as our late eighteenth-century architecture must have many roots thrown out in different directions, but of all these surely the root pointing northward furnishes the most promising clue. And yet it is the one about which we know the least and whose importance we are most incorrigibly given to overlook.

The fault lies very largely, of course, with the architects themselves. It is a common trick for people seeking to establish themselves in a profession to talk a great deal on subjects which will interest their prospective clients. It is another, even commoner, to try and impress these clients with a display of unusual qualifications. Robert Adam, the most loquacious of the four, as well as the most enterprising, fell naturally into both. No English enthusiast showed the faintest spark of interest in Scotland or Scottish architecture. Sicily, Greece, the Levant were, on the other hand, as much the subjects of fashionable discussion everywhere as the Gold Coast is today. No one would be likely to commission one of the Adams with the design of a building on the strength of his Scottish birth and upbr nging. But his studies of " the antique " were the best recommendation a man in his calling could boast, and in such studies the Adam family, to do them justice, had invested a capital which, whether reckoned in time or money, was really considerable. Again and again their spokesman, Robert, reverts to the costliness of their classical expeditions. No one can blame him for doing so; on the contrary, we rejoice that he escaped the fate of several other brilliant architects who came back to England to find that fashion had turned completely round in their absence, and that the architectural stock in which they had invested everything was barely worth the paper on which it was drawn out. If the Adams were fortunate in this respect it is partly, no doubt, because Robert wrote so abundantly and so well about the places they had visited. But his activities as a publicist have had the further effect of diverting our eyes from his place of origin towards all manner of foreign wonders, causing them to dwell more particularly upon those buildings, like the Palace of Diocletian at Spalatro, which he had studied at the greatest expense. But there is more in the Adam manner than Diocletian's architect ever knew, and the Scotland of the Renaissance is well worthy of the study of all who are not convinced that with Sion House and Lord Charlemont's casino English architecture ceases to have any connection with English life and thought.

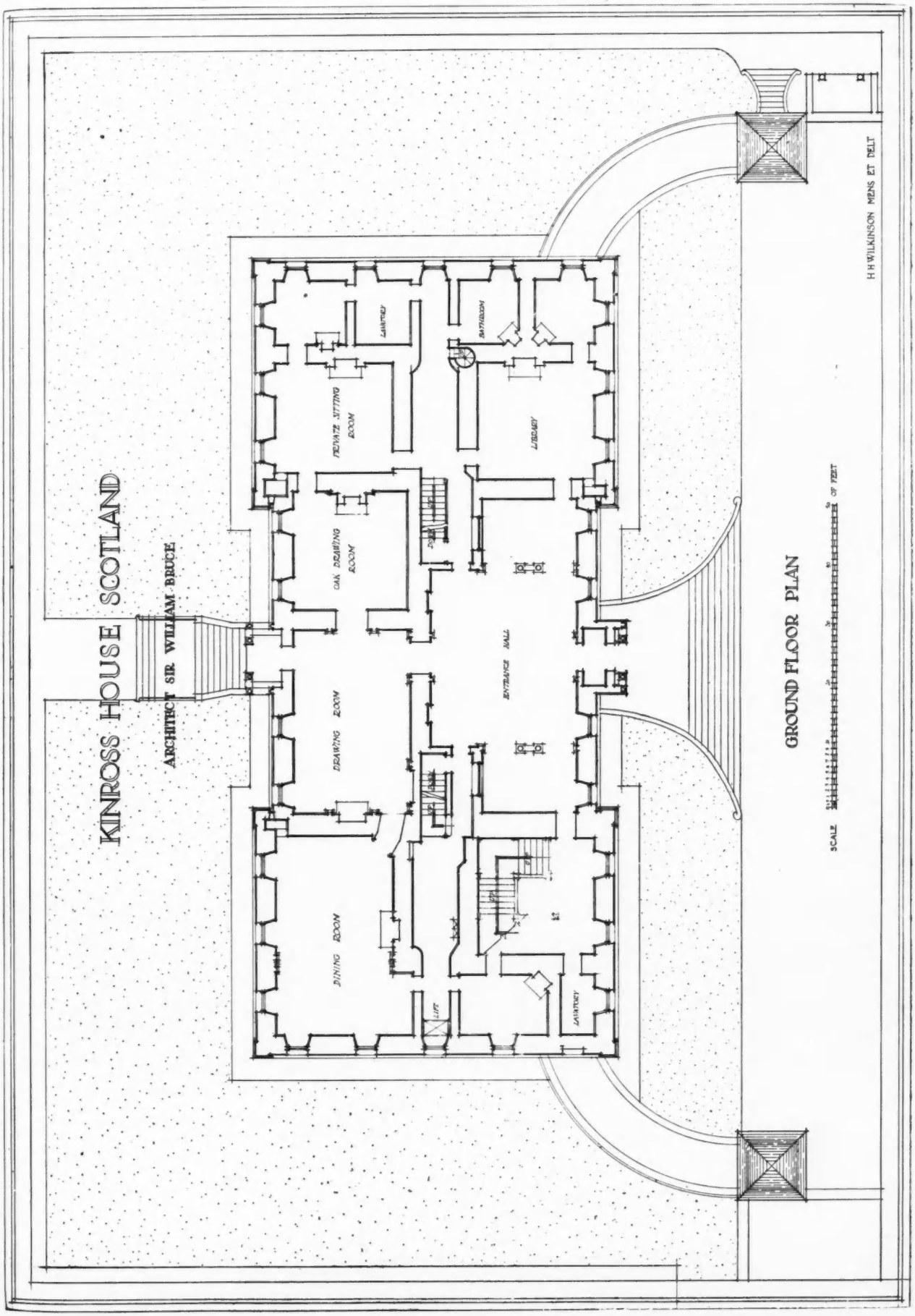
The architectural setting among which the four, Robert, John, James, and William, grew to manhood is a rich and complex one, but as children they knew an environment which may mostly be summed up in the name of Kinross House. Their father was born at Kinross, where he was a pupil and *protégé* of Sir William Bruce; it has even been conjectured that he was christened after Bruce, who died in the year Adam attained his majority. It was at Maryburgh, now Blair Adam, four miles from Kinross, that William Adam brought up his four sons. That Kinross furnished the children with their first conception of architecture no reasonable person can doubt. The debt is handsomely acknowledged in the engraving of the house done by the father for his *Vitruvius Scoticus*. It is the only plate in that work to be treated as a perspective view, complete with background, foreground, and sky. But the clearest sign, and the only one that matters, is to be found in the buildings afterwards designed by the Adams themselves. The debt they owe to Kinross House is as clear as the debt Wren's Greenwich buildings owe to Stoke Park. Just as the transition from Stoke Park to Greenwich would have proceeded with very few differences had Bernini never lived, so the transition from Kinross House to Kedleston and Charlotte Square was by no means dependent upon the discovery of Spalatro. From whichever angle we study Sir William Bruce's design we shall encounter clear points of contact with the work of a century later.

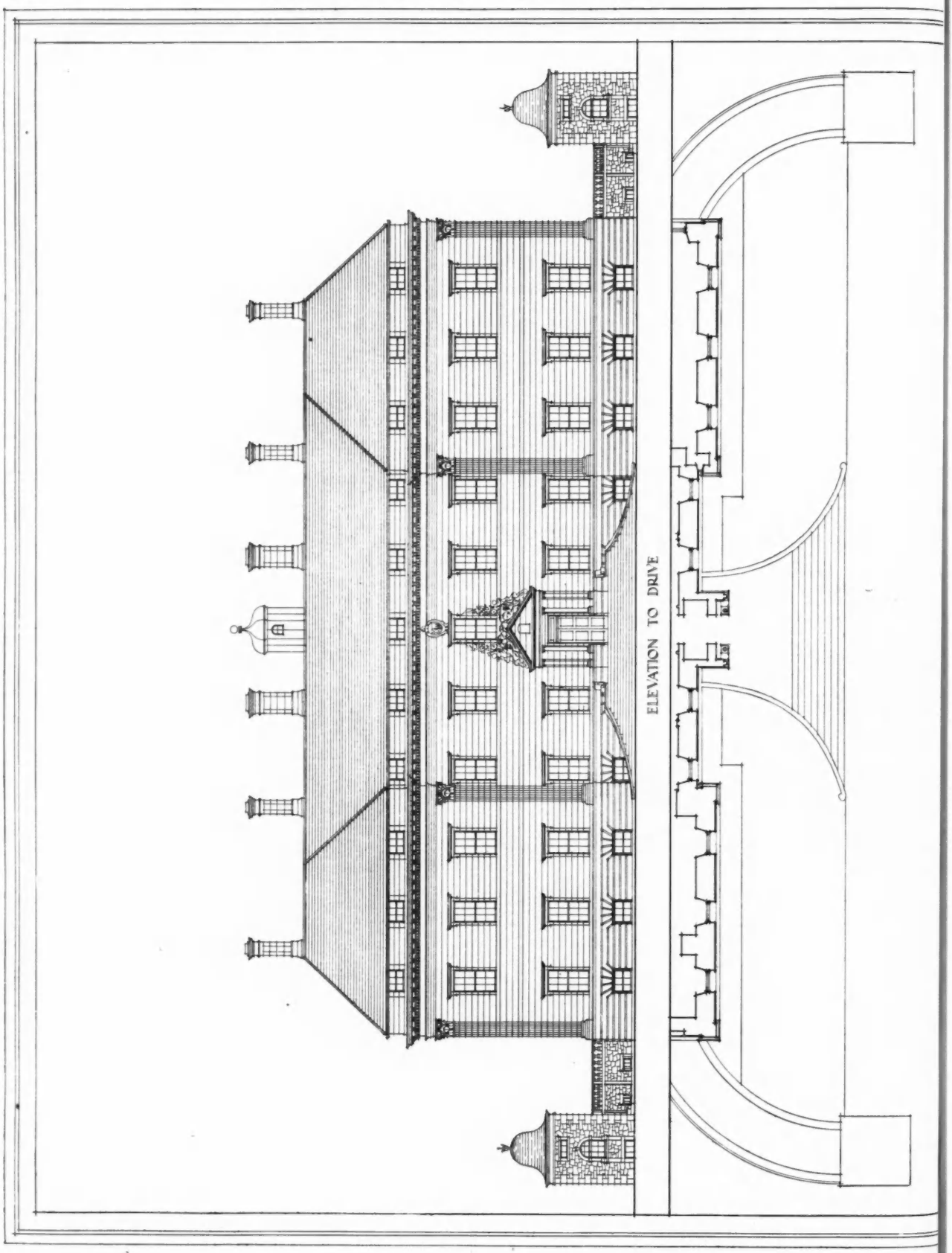
Nor would any of Bruce's other works have been able to exert quite the same influence. The effect of a building upon its successors must ever be conditioned by the strength and purity of the architectural inspiration present in it. Most often the building is the product of not less than two different personalities working together in varying degrees of harmony or conflict. No matter how many other people may be contributing their share, owner and architect there will always be.

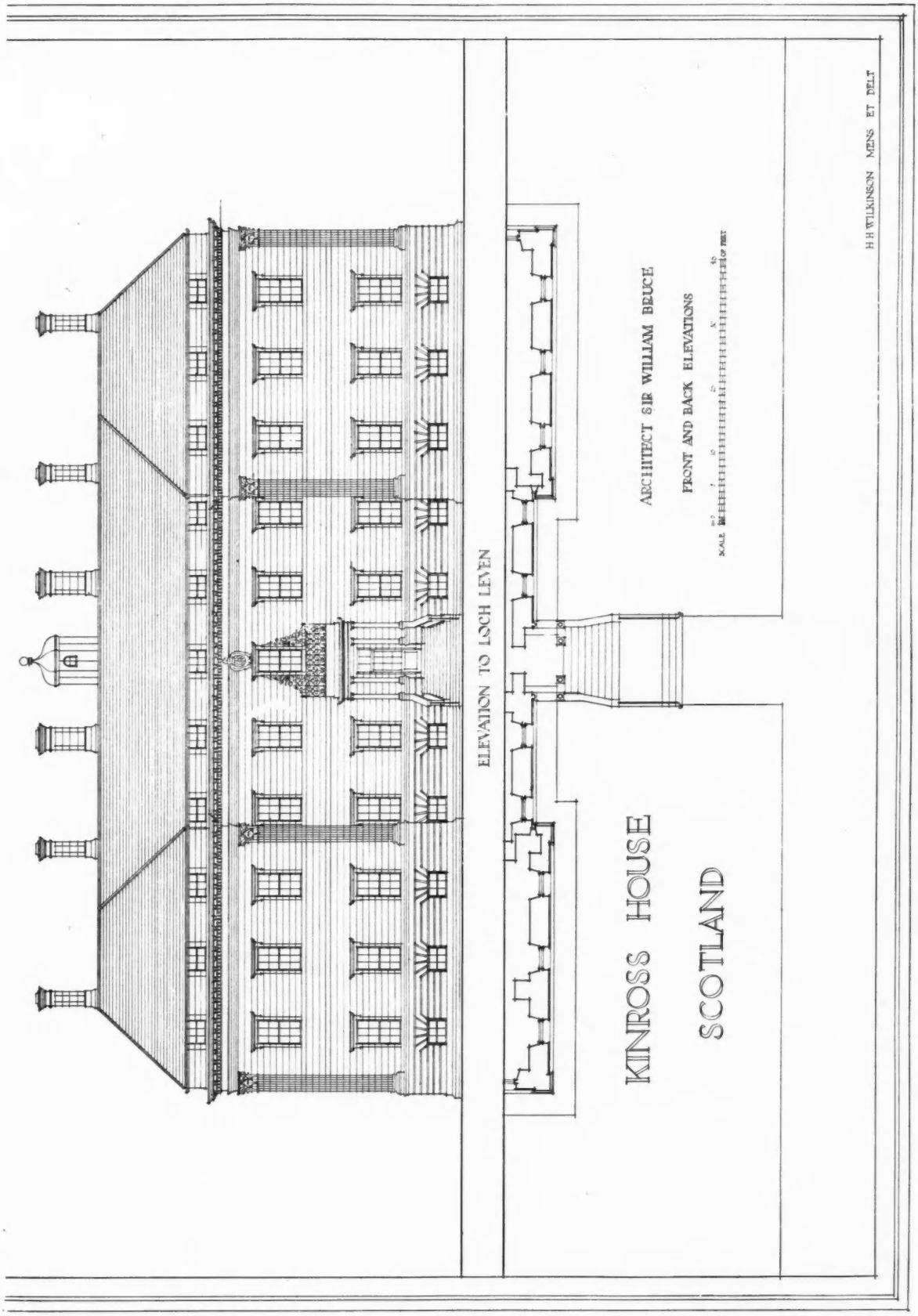
[*To be continued*]

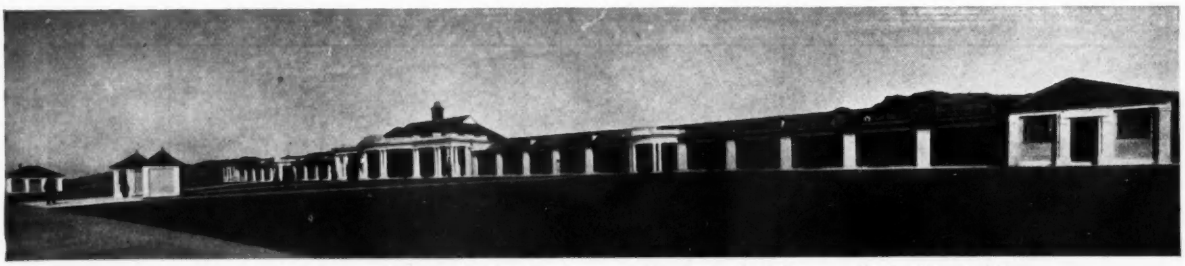


Kinross House. By Sir William Bruce. A view from the drive.

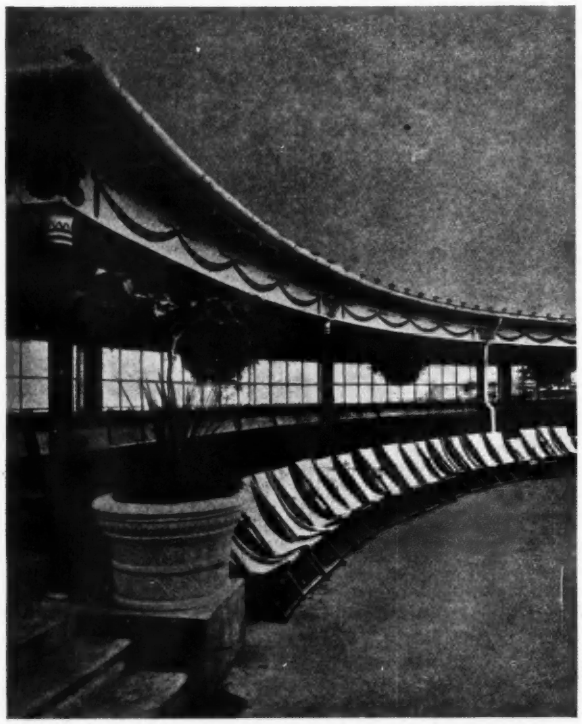

KINROSS HOUSE SCOTLAND
ARCHITECT SIR WILLIAM BRUCE
GROUND FLOOR PLAN
H H WILKINSON MENS ET DELT
PRIVATE SITTING ROOM
LIBRARY
OAK DRAWING ROOM
ENTRANCE HALL
DRAWING ROOM
DINING ROOM
LIFT
LAVATORY
BATHROOM


ELEVATION TO DRIVE


KINROSS HOUSE
SCOTLAND
ARCHITECT SIR WILLIAM BRUCE
FRONT AND BACK ELEVATIONS
ELEVATION TO LOCH LEVEN
H H WILKINSON MENS ET DELT



The new bathing station at Harrison Drive for the county borough of Wallasey. By L. St. G. Wilkinson.



Band enclosure, Worthing. By Adshead and Ramsey. The painted frieze around the enclosure was executed by Miss Mary Adshead.

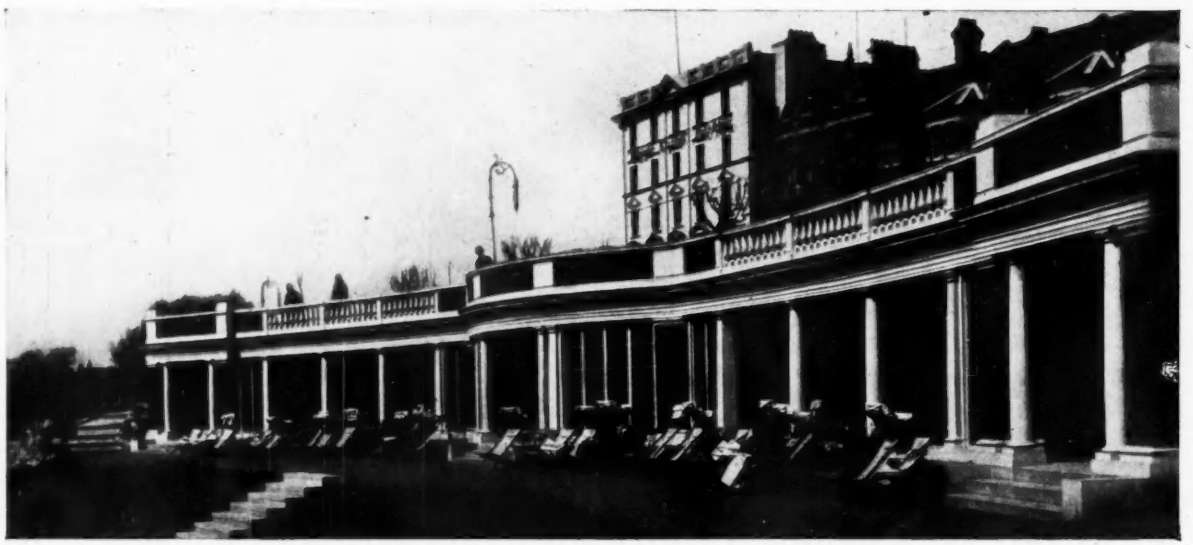
SHELTERS

SOME ATTRACTIVE EXAMPLES.

GREAT interest has been taken in the proposal to erect bathing shelters in Hyde Park, to provide facilities for sun-bathing and swimming. The schemes were recently considered by the Chief Commissioner of Works. Apparently the only objections that have been made against the proposals are based on the assumption that such shelters would spoil the beauty of the parks. No assumption could be more incorrect. A good building, carefully placed and designed with due regard to its surroundings, can be an asset to any site, however much it may be distinguished for its natural beauty.

The illustrations on this and the facing page show some examples of bathing and other shelters that have been erected in this country.

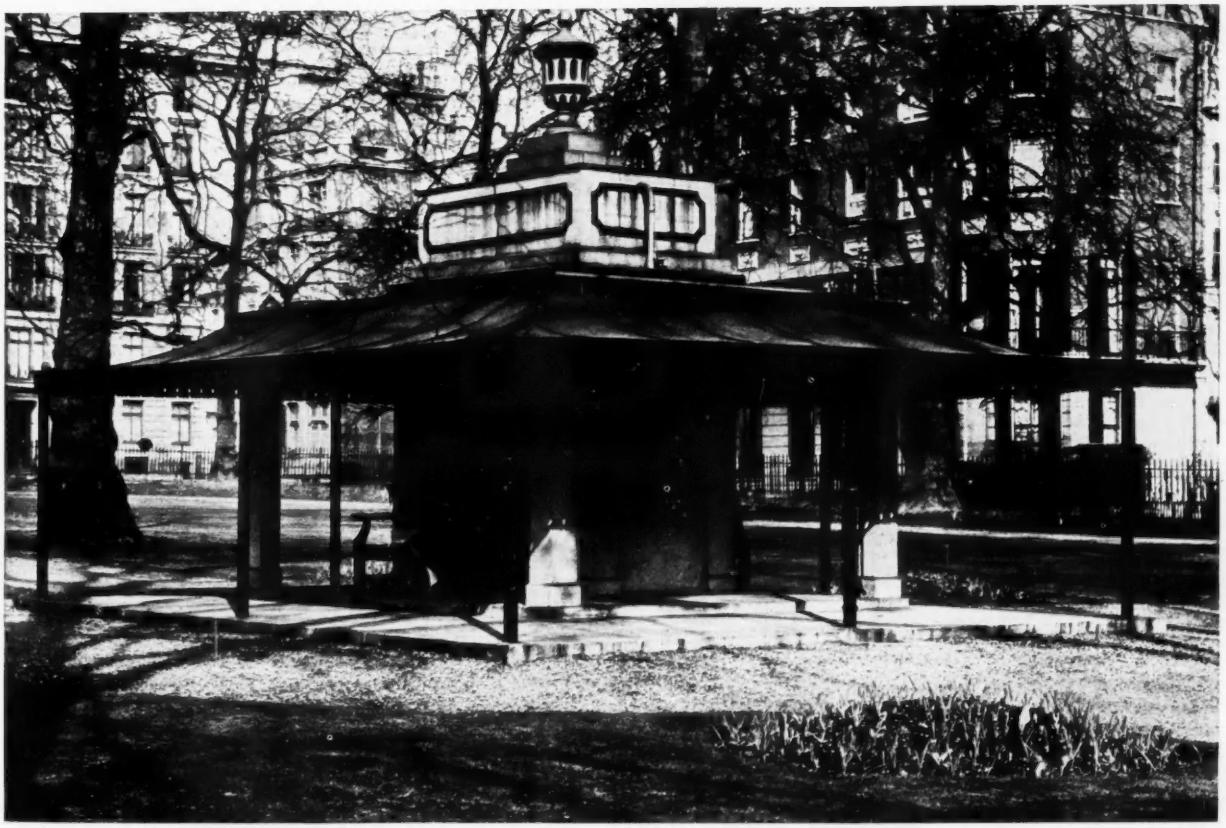
Two examples of shelters of widely different design, each of which gives a pleasing effect, are those in Berkeley Square Gardens, London, and on Lord Aberconway's Prestatyn estate in North Wales. The former is a Regency stucco and metal shelter with a central structure of substantial and dignified design. This is worthy of special attention as the high standard of the design adds to the beauty of its surroundings. The latter example was provided at Prestatyn to provide facilities for sheltered bathing, and also buildings for music and dancing : in fact a social centre for visitors. Shelter from the sun, rain and wind is obtained by glazed and roofed wood colonnades.



The shelter, Westcliff-on-Sea. The building is of brick and stone.



The pavilion and swimming pool, Prestatyn, North Wales. By Easton and Robertson. The glazed roof and wood colonnade on the north side.



The shelter in Berkeley Square Gardens, London. This Regency stucco and metal shelter has an ample and protective air. The central structure is substantial and dignified, and a worthy example of shelter design.

LITERATURE

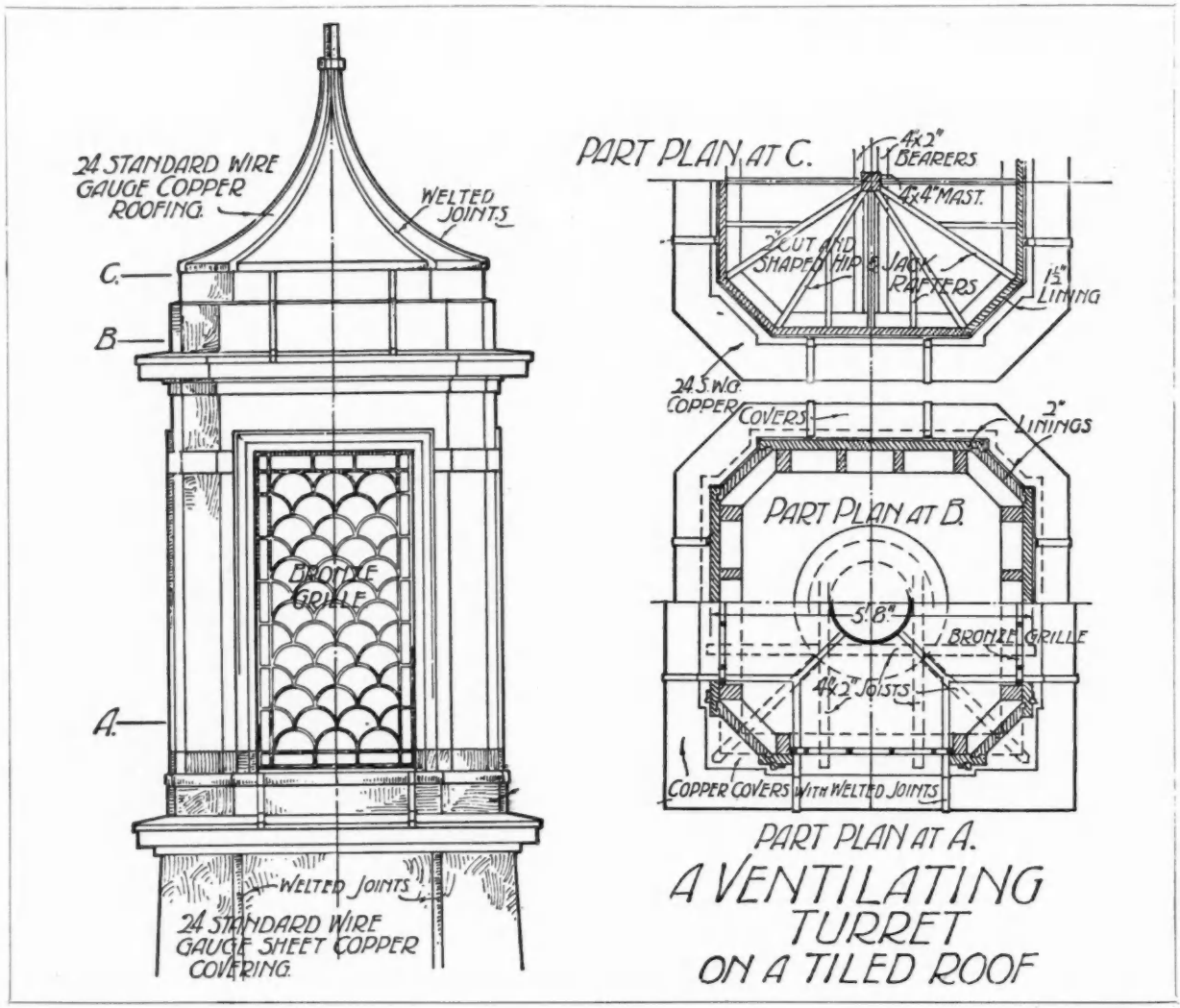
JAGGARD'S BUILDING CONSTRUCTION DETAILS

This series of sixteen plates of building construction details forms part of a work which Mr. Jaggard was engaged upon up to the time of his death. They are conceived and executed as standard constructional examples of an architectural character, thoroughly detailed and beautifully drawn. In selecting subjects for treatment the author has kept in mind the needs of the modern architect, and has illustrated accepted methods of construction which are capable of variation and application to many kindred examples of architectural detail.

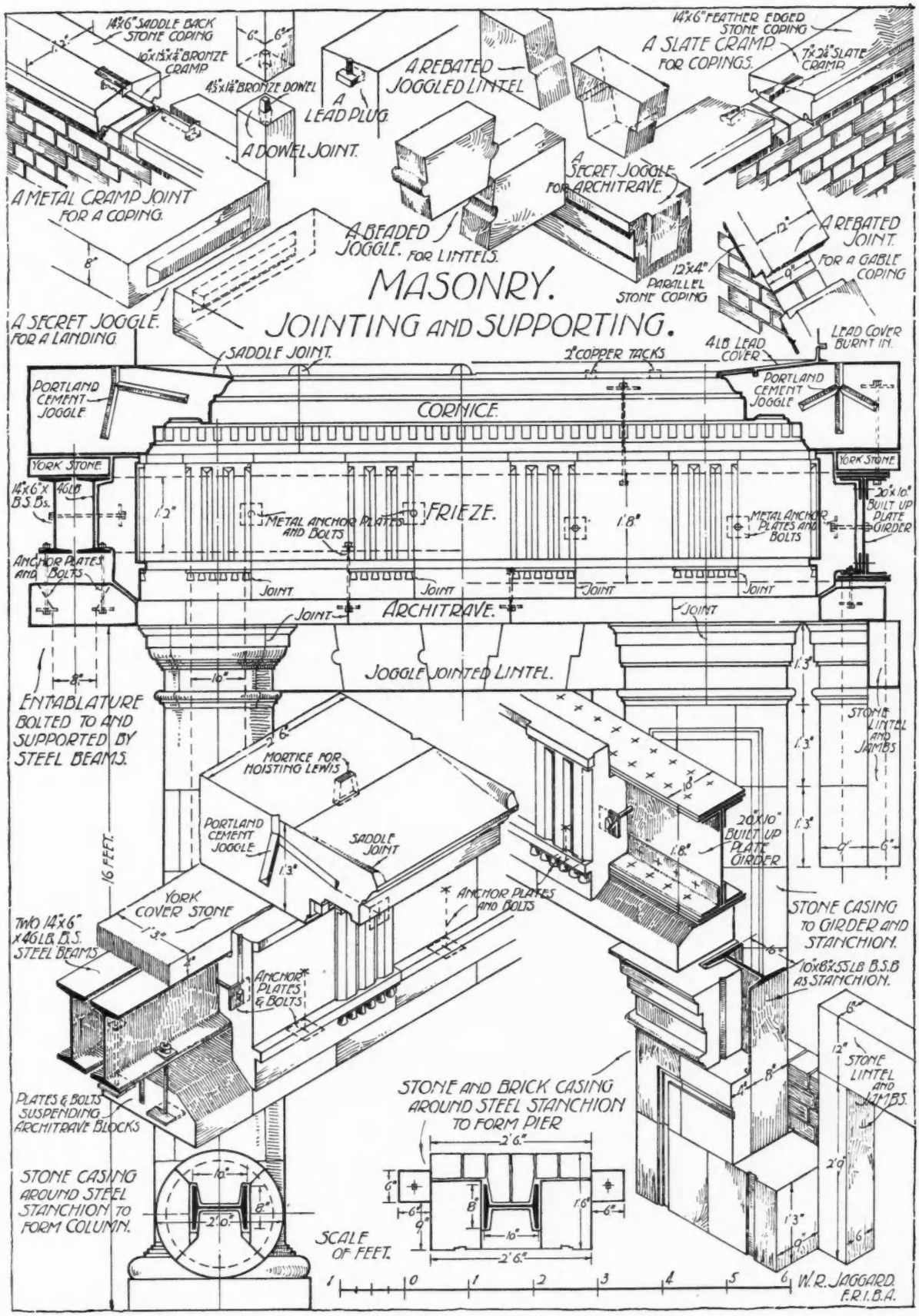
As works of reference for practising architects and examples for the guidance of students these plates will form a valuable addition to the private bookshelf and to the school library and studio. The details are very clearly drawn and the grouping of the subject matter is characteristic of Mr. Jaggard's work, cleverly and artistically arranged.

There are some outstanding examples which are worthy of special note. The plate on masonry shows the clothing of modern steel framing by stonework in the form of pilasters and columns, and the supporting and securing of a complete entablature to steel beams. Carpentry is represented by several examples, a : a framed and copper-covered ventilating turret on a tiled roof; b : a framed timber bridge between two buildings; c : a series of interesting and efficient roof trusses, some of which are of the type known as " sandwich " construction; d : temporary carpentry in shoring and centering. Structural steelwork includes stanchions and beams and their connections and supports, north light roofs, trussed rafter and horizontal-tie roof trusses. An interesting plate on terra-cotta construction shows methods of building up and anchoring strings, cornices, window-heads, columns, and balustrades. Much of this detail is associated with steel-framed construction.

Fire-resisting construction in floors and stairs and in the casing of beams and stanchions is comprehensively treated. Modern steel casements are associated with cast-iron panelled fronts in a portion of a façade typical of city commercial structures. The plates on joinery embody details of sliding sashes, casements, dormer windows, and lantern lights. Details of tiling and slating, plumber's fittings and jointing, and plasterwork are well treated, the latter illustrating chiefly fibrous plaster decoration. There are



A full-size reproduction of a portion of a plate on carpentry. [*From* Plates of Building Construction.]



Masonry Jointing and Supporting. [*From* Plates of Building Construction.] *Each plate in the book measures 14½ in. by 10 in.*

also examples of brickwork and other foundations, drainage details, and patent glazing.

The entire work is excellent in character and varies sufficiently from Mr. Jaggard's previously published drawings to meet with acceptance amongst those who have already become familiar with his work. An appreciative introduction by Professor Richardson adds to the value of this publication and assists the reader to understand the basis and intention of Mr. Jaggard's scholastic and published work.

F. E. DRURY

Plates of Building Construction. By the late W. R. Jaggard, F.R.I.B.A., with an Introduction by Prof. A. E. Richardson, F.R.I.B.A. The Architectural Press. Price 8s. 6d. net.

DESIGN AND STONE DECAY

"The importance of design as a factor influencing stone decay is demonstrated by the difficulties encountered in the repair and restoration work in progress at the Houses of Parliament. The elaborate Gothic ornamentation in the design was primarily responsible for the rejection by the original selection committee of types of stone more durable than that finally recommended. Where buildings are to be erected in localities in which atmospheric impurities hasten decay, it is suggested that the factor of durability should receive first consideration, and architectural features should be adapted to the most durable material available. Much remains to be learnt about the weathering of stone in polluted atmospheres. The strength loss exhibited by some stones is largely influenced by the lamination present in all sedimentary rocks. Freestone blocks for columns should be so cut that the vertical axis of the cylinder is at right angles to the natural bed. If cut so that the axis is parallel to the bed, the laminations weather out in course of time, and the column flakes."—ANON.: *Quarry*, 1929, 34 (388), 201-2. The latest issue of Building Science Abstracts, from which the above is culled, deals, like its predecessors, with subjects of interest to the building industry, teachers of building science, manufacturers of building materials, and research workers. The abstracts are classified under twelve headings, and are followed by book notices and references to patents. Publication is monthly except August; a double number (August-September) appears at the end of September.

Department of Scientific and Industrial Research: Building Science Abstracts, Vol. II (New Series), No. 7. July 1929. Abstracts Nos. 1280-1560. H.M. Stationery Office. Price 9d. net.

B.F.S.A. NEW SPECIFICATIONS

The British Engineering Standards Association has issued a further specification relating to road materials, namely for concrete flags in Portland cement. This specification corresponds closely with that issued last year for concrete kerbs, channels, and quadrants, and contains requirements as to the aggregate, the preparation of the concrete, and the moulding, cludes tests for transverse stre of wear and absorption, and a minimum weight per cubic foot. Provision is made for the use of rapid-' cement. Four sizes of flags, ea thicknesses, have been standa

The British Engineering S' Association has also issued a furt specifications, forming part of the series of sixty-one paint and v specifications which have b course of preparation during t. last two years. These are: No. 389-1929, zinc chromes for paints; No. 390-1929, oil pastes (coloured) for paints; No. 391-1929, tung oil; No. 392-1929, white titanium dioxide pigment for paints; No. 393-1929, tinted oil pastes for paints. As in previous specifications in this series, they contain clauses regulating the composition, together with standard reception tests for the purchaser of these materials; appendices being also incorporated outlining standard methods for carrying out the tests. Copies may be obtained from Publications Dept., British Engineering Standards Association, 28 Victoria Street, London, S.W.1, price 2s. 2d. each, post free.

There now only remain four specifications to complete the series, namely: turpentine, type 2; aluminium powder for paints; purple oxide of iron, ready-mixed paints; and Venetian reds for paints.

In addition, a British Standard schedule of colours for ready-mixed paints is being prepared, which should form a very useful guide not only to technical men but to every householder.



The screen and doors at No. 11 The Canal, Salisbury. [*From* The Architectural Review.]

The Architectural Review

The screen and doors of No. 11 The Canal, Salisbury, an illustration of which appears on this page, are reproduced from the current issue of *The Architectural Review*. The screen and doors probably formed part of a general refitment of the building which cannot have taken place before 1760, and probably did so at a later date. There is some doubt as to the designer of the doors; tradition says it was Robert Adam, although no evidence exists of any work being done by him at Salisbury. The screen is of

wood with compo enrichments; these and the glazing bars are now gilt, the groundwork being painted white. The glazed panels to the door, and the fanlight over, still retain the original crown glass which is set in lead glazing bars. The screen and doors have been measured and drawn by Mr. G. H. Willson, and reproduced in the *Review*.

Another notable feature of the *Review* is an article on "The Architecture of Wine" by Mr. P. Morton Shand. Many different bottles of various shapes and forms illustrate this article, and below are reproduced two typical examples.

One is of German Rhine-wine bottles, and the other of typical Stein Wein *Bocksbeutel*.

LAW REPORTS

BREACHES OF COVENANT

...v. Ercoli and another. King's ...ivision. Before Mr. Justice Branson

... was an action against the ad-...rators of the late Peter Ercoli ... Mr. Bragoni to recover possession ... house and ...hop at High Street, ...den Town, on the ground of ... ...ed breaches of covenant. There wa... also a clain for rent and mesne profits.

Defendants denied any breaches of covenant and sought relief against forfeiture.

His lordship, in his judgment, dealt with the facts of the case and said it was not contended that any case of forfeiture arose through non-payment of rent, but he must hold that there were breaches of the agreement by reason of the putting in of a new shop-front by Bragoni and his carrying on there the trade of confectionery, of which plaintiff was entitled to complain. Defendants contended that even if there had been breaches, no notice complying in section 146 of the Law of Property Act, 1925, had been given. The notice relied upon was a letter sent by plaintiff's solicitors and it seemed to his lordship that the latter complied with the requirements which had been laid down for such notices in that the tenant when reading it could be under no illusion as to which of the covenants in the agreement he was alleged to have broken and what he was being called upon to do in order to remedy the breach. He thought the plaintiff was entitled on October 12 to a decree of forfeiture of Ercoli's leases and to possession subject to the counterclaim for relief. Plaintiff's lease had now expired and Bragoni had become the freeholder of the premises. The fair way of dealing with the matter was to give plaintiff by way of mesne profits the difference between the rent he would have got and the rent he would have had to pay and he would accordingly have judgment for £127 10s.

GLASSHOUSES: A RATING QUESTION

Godber v. *Bedford Assessment Committee. King's Bench Divisional Court. Before the Lord Chief Justice and Justices Avory and Branson*

This was an important appeal under the Rating and Valuation Act, 1925, and the appellants were the Bedford Assessment Committee, who appealed from a decision of the Bedford Quarter Sessions in favour of Mr. J. Godber, a market gardener, of Willington, Bedford. The Justices at the Sessions allowed an objection by Mr. Godber against the draft valuation list and ordered the assessment of gross value of £282 on his glasshouses, etc., to be deleted from the valuation list and reduced the assessments of the net annual value and rateable value.

It appeared that Mr. Godber occupied 13 acres of land, but the appeal only concerned just over an acre covered with glass and other buildings. In respect of this, Mr. Godber contended that he was entitled to exemption under part 1 of schedule 2 of the Act.

The rating authority submitted that the matter fell within class 5 of part 1 of the 2nd schedule of the Act.

The Court held that the appeal failed, and dismissed it with costs.

In giving the judgment of the Court, the Lord Chief Justice said the legislature had thought fit to describe this Act as "an Act for the simplifying and amending the law and to promote uniformity," but in fact, it preserved and repeated terms previously well known in other Rating Acts, but gave to them entirely new meanings. The Act was, therefore, exceedingly difficult to construe. The whole point was whether the gross value of this particular hereditament should have been ascertained and inserted in the draft valuation list. It was common ground that the hereditament came within part 2 of the schedule, and it was common ground that a deduction was to be made from the annual value to arrive at the rateable value, but the controversy turned upon the question how that was to be done. The Assessment Committee was of opinion that it was necessary to ascertain the gross value and the net annual value was only to be ascertained by applying to



Left: German Rhine-wine bottles. On the left is a brown Hock *bottle and on the right a green* Moselle *bottle. Right: Typical Stein Wein* Bocksbeutel. *That on the left is blown and that on the right is moulded.* [*From* The Architectural Review.]

the gross value the restricted and rigid scale of deduction in part 1 of the 2nd schedule. He refrained from deciding the question whether "and" should be read as "or" in the expression "houses and buildings," or whether the expression should mean "houses and. (or) buildings," or "houses or buildings." He did not think it was possible to say that these particular buildings came within the category of "house and buildings with land"; they seemed to be *ex concessis* buildings occupied together with land and forming part of a market garden. All he did was to decide the difficult question whether the Appeal Committee was right in finding that the hereditament fell within section 22 (1 b) and within clause 2 of part 2 of the 2nd schedule of the Act. He thought the committee was right and that the gross value of this hereditament need not be inserted in the draft valuation list.

Justices Avory and Branson agreed.

READERS' QUERIES

WHAT IS A TENEMENT?

Subscriber writes: "What exactly is meant by 'a house divided into tenements back to back'? in section 17 of the 1925 Housing Act, which is a reinactment of the same section in the 1909 Town Planning Act. A medical officer of health, who is also a barrister, says it means a big block of tenements like Peabody Buildings or L.C.C. blocks of flats. I maintain it means any house divided into two or more dwellings. Sir Frederick Pollock has defined a tenement as anything that can be separately held and including, therefore, a flat. . . ."

The question is, what is the true construction of the word "tenements" in section 17 (1) of the Housing Act, 1925? This section enacts that: "Notwithstanding anything in any local Act or by-law in force in any borough or district, it shall not be lawful to erect back-to-back houses intended to be used as dwelling-houses for the working classes and any such house shall be deemed to be in a state so dangerous or injurious to health as to be unfit for human habitation for the purposes of the provisions of the Act.

"Provided that nothing in this section shall prevent the erection or use of a house containing several tenements in which the tenements are placed back to back, if the medical officer of health for the district certifies that the several tenements are so constructed and arranged as to secure effective ventilation of all habitable rooms in every tenement."

In my view the word "tenements" used in this section should be interpreted according to the popular use of the word in dealing with workmen's dwellings.

There is no reported decision that I have been able to discover dealing with the matter, but I do not think that the word "tenements," used in the context as set forth before, should be construed as having the same meaning as if it were used in the Law of Property Acts which concerns real estate.

In my opinion when the legislature enacted the above section they did not contemplate the word "tenements" in any other sense than the one which is known to social workers and rent collectors as "tenement flats," i.e. self-contained flats situate in blocks of low rental value, and they did not intend it to be interpreted in a way that "tenements" would be interpreted by conveyancers of Lincoln's Inn when dealing with real estate.

For these reasons I think that the definition of Sir Frederick Pollock of "tenements" is not applicable to this case, and the New York Tenement Act would be no authority.

It must be borne in mind that the construction of a statute by the Court depends upon the judge who is trying the case, and it may be that one judge would be of opinion that the view I have expressed is right, whilst another may decide to the contrary.

Having regard to these circumstances my opinion cannot be taken as final in the absence of a reported decision.

As to whether the proposed flats are prohibited by section 17 (1) of the Housing Act, 1925, is a question of fact, and in the absence of data of the rents of the property and the locality I am not competent to express an opinion.

E. F. I.

NORTH-COUNTRY BRICKS

Northerner writes: "Textbooks have much to say about the compression strengths of Fletton and stock bricks in lime mortar and in cement mortar, and blue bricks, etc., but never have I seen a word about good red pressed panelled bricks built in ground mortar (i.e. two of engine ashes and one of lime ground in a mortar mill). North-country builders say they are as good as London bricks in cement. My own opinion is they should safely carry 5 tons to the foot sup. Has your expert any information to give me?"

The strength of any particular sample of north-country brick should be made the subject of special tests before use, since bricks obtained from different fields vary considerably in quality. In general, the north-country red pressed brick may be classed with the Fletton, which has an initial strength greater than the London stock, though it has still to be proved that its endurance is as great in unfavourable atmospheres charged with acid fumes.

The red pressed brick buildings of the north country often show signs of advanced scaling at an age when the stock brick has not been affected. Recent investigators have suggested that the open texture of the stock brick is a safeguard against scaling, and where strength at the end of a long period of years is concerned this point must be taken into consideration.

The use of engine ashes is a local custom often adopted in places where clean, sharp sand is not easily or cheaply obtainable. The advantages in regard to strength are debatable, good ash being better than bad sand, and vice versa. Underburnt ash produced from unsuitable coal is liable to swell in the work and cause dislocation of the bricks months or even years after they have been laid, so that the use of ashes in mortar should not be indiscriminately encouraged. The strength of ash mortar is probably only about equal to that of lime mortar made with sand, and though its advocates claim superiority for it, in view of the danger mentioned above, it should be subjected to special tests before being used in important work.

The suggestion that north-country red pressed bricks in ash mortar should carry safely a load of 5 tons to the foot is optimistic. In the London County Council's allowance of "5 tons per square foot" for "ordinary brick in *cement* mortar" a special proviso is made limiting the height of any pier to six times its least dimension, and the thickness may not be less than 13½ in. Brickwork in lime mortar is given a maximum safe load of only 1½ tons per square foot in Hurst's handbook, and even supposing ash mortar to be, in certain cases, an improvement on lime and sand, the difference between 1½ tons and 5 tons is excessive.

It is not realized sufficiently that piers of brickwork are rapidly reduced in strength as they are made higher, and that a strength expressed in tons per square foot of section implies some particular proportion of height to least width. Eccentricity of loading and oblique loading due to wind pressures are ordinary conditions in practice, and it is also usual to build 9 in. and 4½ in. walls to heights of 10 ft. and 12 ft. In such cases it would be injudicious to expect a wall built of north-country red pressed bricks in ash mortar to bear anything in the neighbourhood of 5 tons to the square foot. The wall would be liable to take up a slight curvature as it settled, and the distortion would become more pronounced by slow degrees in succeeding years.

The comparatively high figures for the actual crushing of the brick piers are delusive in such cases, for the wall as a whole fails by bending and displacement of its component parts, and

not by straightforward crushing. The following figures indicate the strength of *short* piers of different bricks in lime and in cement mortar:

Type of brick.	Tons per square foot of section required to crush piers.		
	Lime Mortar.	Cement Mortar.	Dry specimen of brick.
Stock ..	10-20	14-40	84
Leicester Red	30-45	48-86	382
Fletton ..	30-31	55-56	220
Blue Brick ..	69-118	61-139	701

Such testing-machine results are obtained in the limited time of approximately one hour for each pier destroyed; they obviously do not represent at all faithfully the process of gradual failure which goes on in actual structures in response to repeated reapplications of wind stress and vibration during a period of years. After a long-continued process of gradual preliminary deterioration it is probable that a lesser force would suffice to destroy an old pier of similar dimensions.

W. H.

TRADE NOTES

The third edition of *New Ideas in Central Heating: The Use of the Copper*, just issued by the Copper and Brass Extended Uses Council, calls attention to a new departure in central-heating technique, made possible by the introduction of thin walled small-bore copper tubing with compression joints and forced circulation. The fundamental principle of the whole system is that all the fires in the house are replaced by one central-heating furnace, of the slow-combustion type. There are also a boiler, pipes, radiators in rooms, etc., and circulating hot water. One of the chief reasons why householders object to central heating is because of the installation of pipes and the accompanying disturbances. These difficulties are overcome by covering the pipes, or, alternatively they can be made to harmonize with their surroundings. The price of this interesting booklet is 1s.

Lifts and Escalators, a booklet just issued by Messrs. Waygood-Otis, Ltd., gives an interesting history of the evolution of the lift and escalator industry, and, incidentally, of the firm. Waygood-Otis, Ltd., hold the appointment by Royal Warrant of lift makers to H.M. the King. This was first granted to R. Waygood & Co. by the late Queen Victoria, and has been subsequently continued. The company have supplied lifts to Buckingham Palace, Windsor Castle, and Balmoral Castle. They have also supplied lifts to H.R.H. the Prince of Wales, at Marlborough House, and to H.R.H. the Duke of York, at 145 Piccadilly. Eleven escalators were installed by the firm at the new Piccadilly Circus Station. The company have supplied eighty-five escalators for the Underground Electric Railways. These escalators are built by the firm at their London Works, Falmouth Road, S.E. The illustrations in the booklet indicate the conditions under which the company's products are manufactured. The employees today number over 1,300 men and women. Waygood-Otis, Ltd., have offices, resident engineers and workmen in all the principal towns of Great Britain and Ireland. The principal offices are at 54-55 Fetter Lane, London, E.C.4, where a day and night service department is maintained. The company's operations extend throughout the British Empire, there being subsidiary companies in Australia, New Zealand, and South Africa, and agencies in India and other countries.

The telephone number of the General Electric Co., Ltd., Magnet House, Kingsway, W.C.2, has been changed from Regent 7050 to Temple Bar 8000 (70 lines).

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

The "Bull and Butcher" public-house (pages 378-381). General contractors, F. Troy & Co., Ltd. Sub-contractors: W. T. Lamb and Sons, bricks; Matthew T. Shaw & Co., Ltd., structural steel; Siegwart Fireproof Floor Co., Ltd., fireproof construction; Cope & Co., wall tiling; Crittall Manufacturing Co., Ltd., and the Morris Singer Co., Ltd., glazing; Bell's Asbestos and Poilite Co., Ltd., flooring; Abbey Heating Co., central heating; Engineering Works, Ltd., electric wiring; Galsworthy, Ltd., internal electric light fixtures and external lamps; George Wright (London), Ltd., sanitary fittings; Crittall Manufacturing Co., Ltd., casements; Waygood-Otis, Ltd., lifts.

Esher Filling Station (page 382). General contractors, the Triangular Construction Co., Ltd., who were also responsible for the excavations, foundations, dampcourses, and concrete blocks. Sub-contractors: Ragusa Asphalte Paving Co., asphalt roof; S. Kavanagh & Co., reinforced concrete roads; Claygate Brickfields, Ltd., bricks; Wenham and Fowler, casements; Harris, signs.

COMPETITION CALENDAR

November 30. The Hull Corporation invite architects to submit schemes in competition for the façades of the New Street from Paragon Station to Beverley Road, Hull, and openings to adjoining streets. Assessor: Sir Reginald Blomfield, R.A., P.P.R.I.B.A. Premiums: £750, £350 and £150. Applications for conditions of the competition, etc., should be made to J. R. Howard Roberts, Town Clerk, Guildhall, Hull. Deposit £1 1s. Latest date for sending in designs: November 30.

December 7. The Provost, Magistrates, and Councillors of Dumfries invite architects practising in Great Britain to submit competitive designs for the Town Hall and Municipal Offices, which it is proposed to erect on the site of the old Town Hall and of the Municipal Offices, Dumfries. Assessor: Sir George Washington Browne, P.R.S.A. Premiums: £300, £200, and £100. Application for conditions of competition, etc., should be made to R. A. Grierson, Town Clerk, Town Hall, Dumfries. Deposit £2 2s. Latest date for sending in designs: December 7.

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

ANNOUNCEMENT

Mr. Gilbert H. Burton, F.S.I., who was associated with the late Mr. Alan Paull for many years, will carry on the practice in partnership with Mr. Reginald M. Gatward, P.A.S.I. The name and address of the firm will be Burton and Gatward, 12 New Court, Carey Street, W.C.1. Telephone: Holborn 3527.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

25246. Andre, A. Building walls. August 19.

25796. Banks, H. Manufacture of concrete blocks. August 24.

25456. Triclin, A. Building elements. August 21.

SPECIFICATIONS PUBLISHED

317337. Kuert, I. J. Method and apparatus for building concrete buildings.

317550. Gordon, S. B. Spring band and crook hinge for doors or gates, with single or double actions.

317557. Hardy, H. Windows.

317595. Woodall-Duckham (1920), Ltd., and Duckham, A. M. Method and apparatus for the repair of concrete or like structures, furnace linings, or the like.

317643. Ely, C. A. Hinges and hinge fittings for gates or doors.

ABSTRACT PUBLISHED

314935. Enticknap, E. G., The Foundry, Alton, Hampshire. Moulding concrete blocks, cores, &c.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The Ministry of Health has sanctioned the proposal of the Metropolitan Asylums Board to extend the workrooms at the DARENT Training Colony at a cost of £7,833.

Plans passed by the BERMONDSEY B.C.: Building, 106 Weston Street, for Messrs. George Angus and Co., Ltd.; office building, Swan Lane, for Fishers' Wharves and Granaries, Ltd.

EASTERN COUNTIES

Plans have been prepared by Mr. B. B. Franklin showing the proposed layout of streets on land between Montrose Avenue and Bishopscote Road, LUTON.

Plans passed by the LUTON Corporation: House, Woodland Avenue, for Mr. E. Pryer; extension to factory, Charles Street, for Mr. A. Horn; extension, Lee Bridge Inn, Lead Road, for Messrs. Adey and White, Ltd.; workshops, rear of 7 North Street, for Mr. L. E. Mayes; four houses, Carlton Crescent, for Mr. P. Chapman; two houses, Selbourne Road, for Mr. E. G. Bell; extension to factory, 5 Williamson Street, for Mr. W. Sinfield; shop and house, corner Kingsway and Dallow Road, for Messrs. A. Carter, Ltd.; seven houses, Carlton Crescent, for Mr. Percy Chapman.

SOUTHERN COUNTIES

The Ministry of Health has sanctioned the construction of the new bathing pool at BRIGHTON, which it is estimated will cost £175,000. The bath will, it is claimed, be the largest open-air swimming pool in the kingdom.

Plans passed by the EASTBOURNE Corporation: Alterations and additions, Lloyds Bank, 181 Seaside, for Mr. A. G. Johnson, architect; shop and house, Church Street, for Mr. J. C. Bowley, architect; two houses, Longland Road and Dacre Street, for Mr. A. Ford, architect; open-air school, Beechy Avenue, for the borough engineer; six houses, Victoria Drive, for Mr. A. Ford, architect; five houses, Sidley Road, for Mr. F. C. Benz, architect; twenty-seven garages, rear Fitzmaurice Avenue, for Mr. A. Ford, architect; extensions, New Upperton Road, for Messrs. P. D. Stonham and Son, architects; alterations, Belgrave Hotel, for Messrs. Murray, Delves and Murray, architects.

Plans passed at POOLE: Porch addition to dwelling-house, Stanley Green Road, for R. C. Webber; dwelling-house, Glenair Road, for J. H. Wilson and Sons; dwelling-house, Valley Road, for A. T. Pryce for S. J. Milford; dwelling-house, Valley Road, for A. T. Pryce for Mrs. M. L. Robinson; dwelling-house, Valley Road, for A. T. Pryce for Mrs. A. T. Pryce; dwelling-house, Harbour Hill Road, for J. Jagger for B. C. Hanington; dwelling-house, Pinewood Road and garage, Pinewood Road, for H. Soloman; pair semi-detached dwelling-houses, off Ringwood Road (Dunston Lane), for I. Whiffen; amended drainage plan of four houses, corner Dorchester and Foxholes Roads, for C. K. Habgood; addition to garage, Uppleby Road, for W. H. Haywood; amended plan of dwelling-house, Canford Cliffs Road, and dwelling-house, Canford Cliffs Road, for T. E. Grimes for C. E. Best; garage off Church Road East, for Brailsford and Wood, Ltd., for W. J. Wood; dwelling-house, Lulworth Avenue, for G. Miles; dwelling-house, Cliff Drive, for C. C. G. Osborne for Miss E. Selwyn; three dwelling-houses, Hennings Park Road, for F. Jones; three dwelling-houses, Hoyal Road, for R. Meech; addition (bedroom), to dwelling-house, Glamis Cottage, Churchfield Crescent, for Bromby Bros. for Mrs. M. Singleton; two dwelling-houses, Banks Road, for D. F. Hilliar for L. Exton; dwelling-house, Dorchester Road, for Brailsford and Wood, Ltd., for G. E. Joy dwelling-house, Manor Avenue, for E. Richards; dwelling-house, Good Road, for A. and H. Pritchett Bros. for Brackstone; dwelling-house, Harbour Hill Road, for J. Jagger; dwelling-house, Ringwood Road, for J. M. Blair; bottle store, Rossmore Road, for J. Allner for Strong and Co. (Romsey), Ltd.; garage rear Lochinvar, Ashley Road, for J. Gaylard for Dr. Eakin; dwelling-house, Springfield Crescent, for Bartlett and Whiffen for Mrs. K. F. Hine; amended block plan of dwelling-house, Ringwood Road, for C. Carter; dwelling-house, Gloucester Road, for Philpotts and Manners; addition to dwelling-house, Silverwood, corner Balcombe and Dover Roads, for Crabb and Crabb for C. A. Carr; eight dwelling-houses, Harbour Hill Road, for Corbin and Clark; amended drainage plan of eight dwelling-houses, Bourne Vale Road, for Philpotts and Manners; dwelling-house, Enfield Road, for L. J. Newell and Son for G. Cook; dwelling-house, Ponsonby Road, for Brailsford and Wood, Ltd., for V. A. Young; two dwelling-houses, Valley Road, for C. L. Pryce; dwelling-house, Cynthia Road, for D. Thomas for P. W. Broomfield; dwelling-house, Harbour Hill Road, for Brailsford and Wood, Ltd., for D. A. Wood; pair semi-detached dwelling-houses, Pound Lane, for F. G. Pearcy; dwelling-house, Anthony's Avenue, for E. de W. Holding for H. Bamford; additions, St. Mary's, Penn Hill Avenue, for W. Southgate and Sons for Mrs. Morrow; dwelling-house, Gloucester Road, for Philpotts and Manners for G. Mitchell; dwelling-house off Hill Road, for M. J. Lawford for W. M. Cook; dwelling-house, Canford Cliffs Road, for Alan Stewart for F. Maddeford; greenhouse, Cassel Avenue, for A. Scott for J. W. Woodward; conversion of two detached dwelling-houses into two shops, 129 and 131 Ashley Road, for Bryant and Trowbridge for E. Diffey; dwelling-house, Livingstone Road, for M. J. Lawford for E. Killingley; dwelling-house, Herbert Avenue, for M. J. Lawford; dwelling-house, garage and entrance lodge off Canford Cliffs Road, for S. Tugwell for Brig-Gen. H. H. L. Malcolm; dwelling-house, Harbour Hill Road, for J. Jagger; dwelling-house, Brixey Road, for S. G. Ward; dwelling-house, Motcombe Road, for E. de W. Holding for G. Peterson; dwelling-house and garage, Mayfield Avenue, for F. Lawrence for Stretch, Baxter and Curry; dwelling-house, Anthony's Avenue, for W. B. Chinchen for Mrs. M. W. Joass; dwelling-house and garage, Widdicombe Avenue, and dwelling-house, Widdicombe Avenue, for W. B. Chinchen for the Parkstone Links Estates, Ltd.; dwelling-house, Dorchester Road, for Brailsford and Wood, Ltd., for J. W. P. Spetch; alterations and additions, 163 High Street, for H. R. Collins for Messrs. Williams, Ltd.; dwelling-house, Hennings Park Road, for A. Green; alterations and additions, Sandecotes School, Sandecotes, for Walter Hoare and Sons for the Church Education Corporation; additions to dwelling-house, 75 Layton Road, for C. Humber for F. Smith; dwelling-house, Hennings Park Road, for C. R. Symonds for W. H. Clarke; dwelling-house, off Old Wareham Road, for E. J. Wilkins; dwelling-house, Albert Crescent, for W. G. Crane and Son for F. J. Wills; dwelling-house, Alder Road, for C. R. Symonds for Rosser and Sturman; additions, Longfleet Congregational Church, corner Longfleet and St. Mary's Roads, for H. J. Vick for the Trustees; semi-detached



House at Brockenhurst, Hampshire. Designed by Paul Phipps. The building is of concrete blocks covered with plaster. The roof is covered with straw-thatch.



House at Brockenhurst. The sitting-room. The fireplaces in this and the dining-room are built with Dutch tiles and have painted wood mantels

dwelling-house and shop and two flats, Palmers Road, for H. G. Palmer; addition to dwelling-house, Martello, Uppleby Road, for F. G. Nutt for Mrs. Williams; boathouse, Parnorama Road, for Rumsby and Rodd for Capt. R. C. Collis; dwelling-house, Gloucester Road, for Philpotts and Manners; dwelling-house, Gloucester Road, for Phillpotts and Manners; dwelling-house, Elms Avenue, for R. J. Bishop for W. Edmonds; alterations, 233 High Street, for J. Allner for E. Harker Curtis; two dwelling-houses and two garages, Salter Road, for H. J. Hillman for W. A. Beresford; conservatory addition, Quisisana, Banks Road, for W. B. Budden for Sir H. Downer, Bart.; garage, Pine Avenue, for S. G. Ward; garage and coal shed, Canford Cliffs Road, for T. E. Grimes for C. E. Best; garage, Waverley, Rossmore Avenue, for Miss A de Vere Woodrow; garage, Glenair Road, for J. O. Corin; store, rear 105 Penn Hill Avenue, for J. T. Jones; re-erection of garage, Banks Road, for H. E. Hawker, Mountain and Bailey for Mrs. Staddon; store, rear of 238A Ashley Road, for W. R. Robbins; garage, Sharrow House, Mount Road, for K. Gadd; two garages, Cosy Nook, corner Brownsea and Seacombe Roads, for W. D. Dyce; garage, Corner Gates, Wellington Road, for G. Kay; garage, 55 Parkstone Road, for Mrs. D. O'Hara Burnard; garage, Mayfield Avenue, for Mrs. B. Lintott; garage, Birchwood Road, for A. T. Robbins; garage, Cliff Drive, for C. C. G. Osborne for Miss E. M. Selwyn; workshop and office, Bournemouth Road, for D. B. Dixon; garage, Elms Avenue, for W. C. Edmonds; garage addition, rear of Brantwood, Longfleet Road, for E. B. Elford.

SOUTH-WESTERN COUNTIES

The COLEFORD Urban District Council has decided to erect twenty more houses in Tufthorne Lane at a cost not exceeding £325 each.

MIDLAND COUNTIES

The Notts Education Committee is to erect an elementary school for 150 children at GRINGLEY.

The Notts Education Committee is to erect an elementary school for 100 children in the parish of LANGAR.

The LEAMINGTON Education Committee is extending the Milverton school at a cost of £8,800.

The managers of the SOUTHWELL (Notts) Church of England school have submitted plans for improvements and extensions to the Board of Education.

The Northamptonshire C.C. is to construct a new bridge at IRTHLINGBOROUGH on the London-Carlisle main road at a cost of £80,000, and is to widen the Desborough County bridge on the London-Carlisle main road at a cost of £3,000.

The Notts C.C. has obtained sanction to borrow £7,400 for the purchase of Sweetville Hall and land adjoining the Court House and police station at MANSFIELD for the purpose of improving and extending the premises.

Plans passed by the LEAMINGTON Corporation: House, Northumberland Road, for Mrs. Bursill; additions, Lillington Garage, Cubbington Road, for Gen. Service Garage Co.; roughcasting store, Eagle Foundry, Clarence Street, for Messrs. S. Flavel & Co., Ltd.; alterations, Priors House Nursing Home, Lillington Road, for Dr. G. G. Alderson; extensions, Parade, for Messrs. F. W. Woolworth & Co., Ltd.

NORTHERN COUNTIES

Mr. T. S. Barlow is to develop the building estate in the Heaton district of BOLTON.

The BOLTON Corporation has obtained sanction for a loan of £50,000 for further housing advances.

An alternative site on the Grangetown Garden Village Estate, ESTON, has been purchased by Canon English for the erection of a school.

The MANCHESTER Corporation has passed lay-out plans of the Chorlton and Newton Heath housing estate extensions.

The SHEFFIELD Corporation has obtained sanction to borrow £18,500 for additional works at the Lodge Moor Hospital.

Plans passed by the ESTON U.D.C.: Mission hall, Lee Road, Grangetown, for the mission trustees; two houses, Scarborough Street and Harcourt Road, for Mr. E. Green.

The SHEFFIELD Corporation has authorized the city architect to erect, by direct labour, the new branch library at Woodhouse, the cost of which is estimated at £4,500.

The MANCHESTER Corporation has obtained sanction to borrow £52,950 for the purchase of land at Alexandra Park for the purposes of a show ground and open space.

The BIRKENHEAD Education Committee has decided to erect a junior and infant school for 700 children, and a central school for 530 boys and 520 girls on a site in Bedford Drive.

The architect's department of the Co-operative Wholesale Society, Ltd., is to erect buildings to be used as builders' workshops and stores, on land situated at the corner of Palm Grove and Mather Road, BIRKENHEAD.

It was decided at a meeting of the BOLTON Corporation Markets Committee to seek sanction to borrow £135,813 to cover the cost of the erection of the proposed new market buildings and other works for markets purposes.

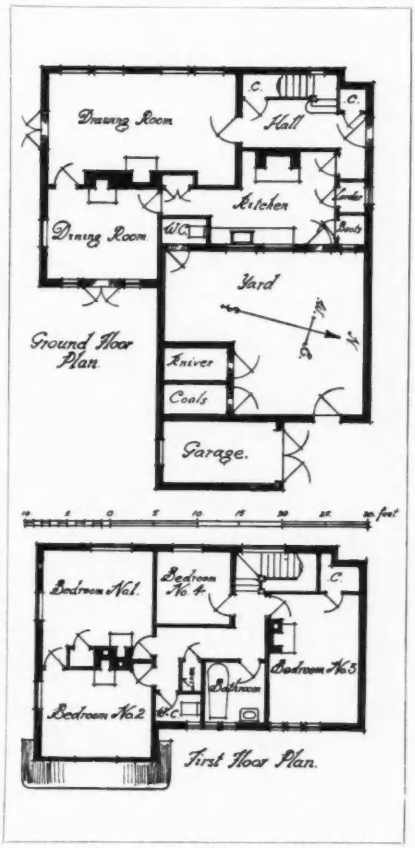
The BIRKENHEAD Corporation are to consider the report and plan of the borough surveyor for the erection of a block of tenement dwellings on a portion of the site situate between Priory Street and Church Street.

Plans passed by the BIRKENHEAD Corporation: Extension to motor wagon and store shed in connection with the Chemical Packing Works, Corporation Road; alterations, 26 Union Street; transformer and switch room, in connection with the engine fitters works at Bridge Street and Sandford Street; alterations, Blue Bell Inn, Park Street.

The BIRKENHEAD Watch Committee has decided that a portion of the land belonging to the Corporation in Borough Road opposite North Road be allocated as a site for new central fire station premises and that application be made for sanction to borrow £25,000 for the provision of the station buildings, workshops, and houses, and the formation of private street surfaces and a drill yard.

Plans passed by the SHEFFIELD Corporation: Fourteen houses, West Quadrant and Hucklow Road, for the Church Army Housing, Ltd.; two houses, Folds Lane, for Mr. J. H. Stevens; 144 houses, Wisewood Estate, for the Corporation; two houses, Arundel Road, for Mr. D. Hurrell; two houses, Granville Road, for Messrs. A. E. Tate; two houses, Whirlow Court Road, for Mr. Edward Walker; house and shop, Cricket Inn Road, for Mr. C. W. Alflat; two houses, Rundle Road, for Messrs. J. Marsden and Co.; house, Barnet Avenue, for Messrs. Bonser Bros.

Plans passed by the BOLTON Corporation: Two houses, Thorns Road, for Mr. W. E. Yates; six houses, Belmont Road, for Mr. George Sykes; house, Plodder Lane, for Mr. Thomas Hope; canteen, Albion Mills, Sidney Street, for Messrs. J. Marsden and Sons; 178 houses, Victoria Estate, Wigan Road, for the Housing Committee;



Ground- and first-floor plans of house at Brockenhurst. Designed by Paul Phipps. Photographs of the house are reproduced on page 400.

thirteen houses, off Ellesmere Road, for Mr. Maurice Welch; six houses, off Bury Road, for Messrs. Winder Brothers; four houses, Bennett's Lane, for Messrs. Yates and Partington; house, Lakeside Avenue, for Messrs. A. E. Cooper and Son; waiting room, Churchgate, for the Capitol Cinema, Ltd.; bungalow, Plodder Lane, for Messrs. Byron Brothers.

Plans passed by the STRETFORD U.D.C.: Sewering and formation, Buckingham Road, for Sir H. E. de Trafford, Bt.; eighteen houses, Buckingham and Railway Roads, for Messrs. Archer and McAlpin; ten houses, Derbyshire Lane, for Mr. J. W. Maunders; house, Hillingdon Road, for Mr. J. C. Ward; twelve houses, Stothard Road, for Mr. E. Jackson; additions to offices, Westinghouse Road, for Messrs. Redpath, Brown & Co., Ltd.; alterations and additions to shops, Chester Road, for Manchester and Salford Equitable Co-operative Society, Ltd.; acetylene gas chamber, Westinghouse Road, for British Oxygen Co., Ltd.; addition to offices, Skerton Road, for British Arcady Co., Ltd.; extension to works, Chester Road, for Messrs. Venos, Ltd.; garages, etc., Croston Street, for Messrs. G. Stuart Murray, Ltd.

Plans passed by the YORK Corporation: Additions, Bishopthorpe Road, for Messrs. J. Terry and Sons, Ltd.; additions, Penley's Grove Street, for Groves W.M. Club; additions, 22, 24, and 26 Blossom Street, for York Railwaymen's Club and Institute; additions, 8 and 9 The Crescent, for Crescent W.M. Club; house and workshop, Heworth Road, for Mr. E. Waudby; additions, East Parade, for Heworth Constitutional Club; three houses, Barmby Avenue, for Messrs. J. Allison and Sons; thirty-one houses, Fleming and Scrope Avenues, for the Corporation; additions, New Walk Tavern, Love Lane, for John Smith's Tadcaster Brewery Co., Ltd.; classroom, Clifton, for Clifton Wesleyan Church trustees; layout of building estate, Acomb, for Mr. J. S. Barlow; sixteen flats, Tuke Avenue, for the York Corporation.

At a meeting of the BOLTON Corporation, a letter was read from the Ministry of Health stating that the Minister has had under consideration the report of the inspector after his inquiry into the Council's application for sanction to borrow sums amounting to £611,000, for town hall alterations and extensions; new sessions hall, police courts, and offices; central library, museum, art gallery and other purposes, and had decided to approve the scheme generally, subject to the proposed mortuary and post-mortem room being separate units, and to a suggested modification in the accommodation to be provided for the purposes of a treatment centre for venereal diseases, and to satisfactory information being furnished with regard to the accommodation proposed for maternity and child welfare purposes. A further report and amended plans embodying the proposed modifications will be submitted to the Committee at an early date.

Plans passed by the MANCHESTER Corporation: Two shops and houses and shop and store, Beech Road and Wilton Road, Chorlton-cum-Hardy; eight houses, Sandhurst Avenue, Withington; thirteen houses, Wellington Road and Wilbraham Road, Fallowfield; alterations, "White Lion," Bangor Street and Essex Street, Hulme; conversion of house into shop and house, 44 Webster Street and Warwick Street, Hulme; additions to warehouse, Richmond Street, Princess Street; projection room, Queen's Cinema, Ashton Old Road, Baden Street, and Redvers Street, Ardwick; alterations and additions to works, Barley Street and Dolphin Street, Ardwick; additions to dyestuffs works, Clayton Lane, Clayton; additions, Diocesan Church House, Deansgate; alterations, "Napoleon Inn," Rochdale Road; alterations, "Hare and Hounds," Shudehill and Salmon Street; fourteen houses, Kearsley Road and Tansley Road, Crumpsall; twenty houses in lieu of six houses, Kearsley Road and Tansley Road, Crumpsall; warehouse and work-rooms, Richmond Grove, Longsight; fifteen houses, Kingsway and Wilmslow Road, Didsbury; seven houses, School Lane, Didsbury; 141 houses, Alan Road, Fairholme Road, Ashdene Road, School Grove, Stephens Road, and Heyscroft Road, Withington; alterations to Bijou cinema, Erskine Street and Hyde Street, Hulme.

SCOTLAND

The Western Heritable Investment Co., Ltd., is to erect 756 dwelling-houses at Croftfoot Road, Aikenhead, GLASGOW.

The GLASGOW Corporation Housing Committee is considering an offer by Messrs. John M'Donald (Contractors), Ltd., for the erection of houses of the intermediate and slum clearance types.

Messrs. Walter Hubbard, Ltd., 15 Smith Street, Hillhead, are to extend their premises at the corner of Great Western Road and Belmont Lane, GLASGOW.

The GLASGOW Corporation has approved the layout of the housing schemes at Netherton and West Drumoyne, provision being made as follows: Netherton, forty-eight flatted houses and 174 three-story tenement houses; West Drumoyne, seventy terrace cottage houses and 960 three-story tenement houses.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury..	S. Counties	1 4	1 0
B_2	BANBURY..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_2	Barnard Castle	N.E. Coast	1 6	1 1½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_2	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1*s.* 4*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* NAVVY, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5

DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.

IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0

DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.

LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* BRICKLAYER, 1*s.* 9*d. per hour;* PLUMBER, 1*s.* 9*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour.*

London stocks, per M.	£4	5	0
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	0	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1*s.* 9*d. per hour;* DO. *fixer,* 1*s.* 10*d. per hour;* LABOURER, 1*s.* 4*d.* per hour; SCAFFOLDER, 1*s.* 5*d. per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

ADD to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
DEDUCT for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1*s.* 9*d. per hour;* TILER, 1*s.* 9*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies				£13	0	0
Countess				25	0	0
Duchess				32	0	0
Old Delabole	*Med. Grey*			*Med. Green*		
24 in. × 12 in.	£42	11	3	£45	1	0
20 in. × 10 in.	31	4	3	33	0	6
16 in. × 10 in.	20	18	0	22	4	9
14 in. × 8 in.	12	1	0	12	16	3
Green Randoms, per ton				8	3	9
Grey-green do., per ton				7	3	9
Green peggies, 12 in. to 8 in. long, per ton				5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey			*Med. Green*		
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies, 12 in. to 8 in. long				4	13	6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1*s.* 9*d. per hour;* JOINER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Timber, average prices at Docks, London Standard

Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	4
Mahogany, Honduras, per ft. sup. of 1in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	3
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	9
DO. framed in floors, roofs, etc., per ft. cube	0	5	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 9½d. *per hour;* MATE, *do.* 1s. 4d. *per hour;* ERECTOR, 1s. 9½d. *per hour;* FITTER, 1s. 9½d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
ILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1s. 9½d. *per hour;* MATE OR LABOURER, 1s. 4½d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	2	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 9½d. *per hour (plus allowances in London only);* LABOURER, 1s. 4d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¼ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 8d. *per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅜ in., per ft.	0	0	6½
DO. *½ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span 1s. 6d. to 2s. per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1s. 8d. *per hour;* LABOURER, 1s. 4d. *per hour;* FRENCH POLISHER, 1s. 9d. *per hour;* PAPERHANGER, 1s. 8d. *per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. *The measured work price is on the same basis . . . per ft. sup.*	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, ⅛ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			⅝ in.			¾ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1	0½	10
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1	6	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1	0	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, SEPTEMBER 18

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Metalwork." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, SEPTEMBER 19

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Medieval Sculpture." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C. "Origin of Architecture." By Cecil Hallett, B.A.

R.I.B.A., 9 Conduit Street, W.1. Exhibition of works submitted by candidates for R.I.B.A. Scholarships (Archibald Dawnay) at R.I.B.A. Galleries. 10 a.m. to 7 p.m. Exhibition from September 19 to 28 inclusive. **10 a.m.**

FRIDAY, SEPTEMBER 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "The Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. **12 noon.**

THE ASSOCIATION OF SPECIAL LIBRARIES AND INFORMATION BUREAUX. Annual Conference (Sixth), Trinity College, Cambridge. September 20–23.

SATURDAY, SEPTEMBER 21

Sunrise, 6.42. Sunset, 7.3.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chippendale." By T. F. Wilson, F.R.S.A.I. **7 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to Westminster Cathedral. Meet main entrance 2.15 p.m. **2.15 p.m.**

THE LONDON SOCIETY, Lancaster House, S.W.1. Visit to Coal Exchange and the Roman Hypocaust, 96 Lower Thames Street, E.C. Applications for tickets to the Secretary of the Society.

MONDAY, SEPTEMBER 23

BRITISH MUSEUM, Bloomsbury, W.C. "Arts and Customs of Ancient Egypt—II." 12 noon. "Records of Babylon and Assyria—I." 12 noon. "Greek Sculpture—I." 3 p.m. "Monuments of Egypt—II." 3 p.m. **12 noon.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. 12 noon. "Italian Renaissance Furniture." 3 p.m. **12 noon.**

NORTHAMPTON POLYTECHNIC INSTITUTE, Holloway, N. Commencement of classes in Civil and Mechanical Engineering.

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Commencement of all classes.

WESTMINSTER TECHNICAL INSTITUTE, Vincent Square, S.W.1. Commencement of Session.

NORTHERN POLYTECHNIC, Holloway, N.7. Commencement of Session, Department of Architecture, Surveying, and Building.

TUESDAY, SEPTEMBER 24

BRITISH MUSEUM, Bloomsbury, W.C.1. "Early Britain—III." 12 noon. "Greek Sculpture—II." 3 p.m. "Monuments of Assyria." 3 p.m. **12 noon.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Renaissance Furniture." 12 noon. "French Eighteenth-century Furniture." 3 p.m. **12 noon.**

WEDNESDAY, SEPTEMBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." 3 p.m. **3 p.m.**

THURSDAY, SEPTEMBER 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Seventeenth-century Furniture." 12 noon. "English Eighteenth-century Furniture." 3 p.m. "Jade and Lacquer." 7 p.m. **12 noon.**

FRIDAY, SEPTEMBER 27

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." 12 noon. "Chinese Sculpture." 3 p.m. **12 noon.**

SATURDAY, SEPTEMBER 28

Sunrise, 6.54. Sunset 6.54.

BRITISH MUSEUM, Bloomsbury, W.C.1. "Monuments of Assyria—II." 3 p.m. "Greek Sculpture—II." 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. 12 noon. "Ironwork." 3 p.m. **12 noon.**

THE LONDON SOCIETY, Lancaster House, S.W.1. Visit to Guy's Hospital, St. Thomas's Street, S.E.1. Applications for tickets to the Secretary of the Society.

MONDAY, SEPTEMBER 30

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. Opening of the autumn session of training courses for examinations for sanitary inspectors, smoke inspectors, associateship (general hygiene and sanitation), associateship (food, hygiene, and sanitary science). Particulars obtainable from the Secretary at the above address.

WELSH SCHOOL OF ARCHITECTURE, Technical College, Cardiff. Opening of session.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. **12 noon.**

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last day for entry for Surveyors' Institution Examinations.

THURSDAY, OCTOBER 3

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting, Letchworth. Members and their friends assemble at their hotels in Hitchin, Baldock, and Letchworth. Members will be notified by the Institute in due course of their allotted hotels.

FRIDAY, OCTOBER 4

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting. Meeting at Icknield Halls. Address by Sir Edgar Bonham Carter, K.C.M.G., C.I.E. "Garden Cities, Satellite Towns and Decentralization." 10 a.m. Lunch at Icknield Halls, 1 p.m. Motor coach tour round Letchworth, 2 p.m. Institute Dinner at Icknield Halls, 7.15 p.m. **10 a.m.**

SATURDAY, OCTOBER 5

Sunrise 7.6. Sunset, 6.30.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to London Telephone Exchanges—City, Central, and Trunk. Meet G.P.O. (South), Carter Lane, E.C.4, at 2.15 p.m. **2.15 p.m.**

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting. Motor coach tour to points of interest on the North Orbital Road. 9.30 a.m. Lunch at Welwyn Garden City. 1.30 p.m. Tour of Welwyn Garden City. 2.30 p.m. Dinner at Letchworth Hall Hotel. 7.30 p.m. **9.30 a.m.**

SUNDAY, OCTOBER 6

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting. Visit to Cambridge, to inspect Colleges, &c., under expert guidance. Lunch at University Arms Hotel.

MONDAY, OCTOBER 7

LONDON UNIVERSITY, Gower Street, W.C. Opening of session.

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. Opening of session.

TUESDAY, OCTOBER 8

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last day of entry for R.I.B.A. Intermediate Examination.

THURSDAY, OCTOBER 10

BEDFORD COLLEGE, Regent's Park, N.W. Opening of session.

THURSDAY, OCTOBER 17

ARCHITECTURE CLUB. At the London School of Economics. Supper Discussion. Report as to arrangements. **5.45 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. **12 noon.**

MONDAY, OCTOBER 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. 12 noon. "Architecture." By L. O. Faraker. 3 p.m. **12 noon.**

FRIDAY, OCTOBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chinese Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

WEDNESDAY, OCTOBER 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

MONDAY, NOVEMBER 4

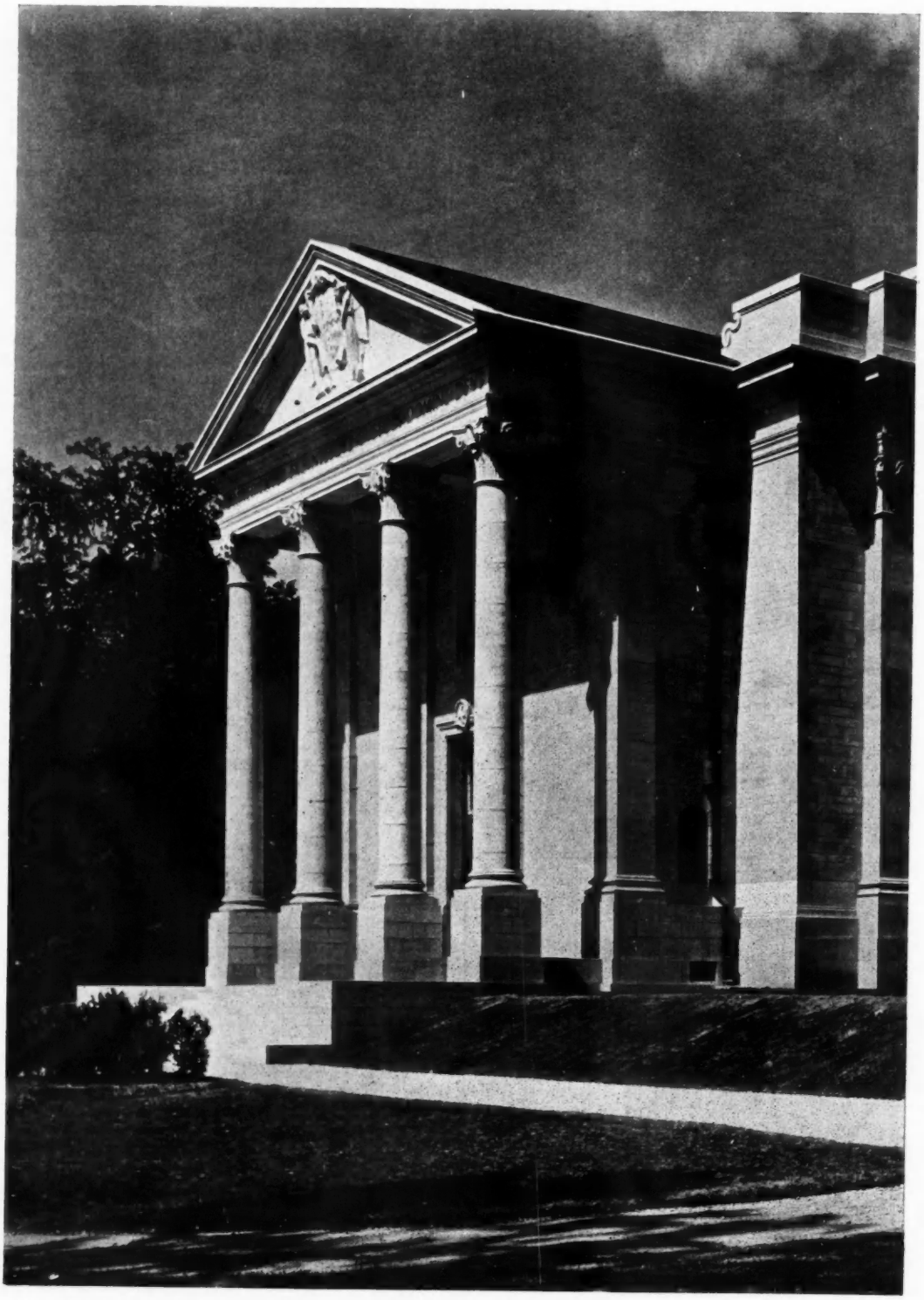
L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last date for entry for R.I.B.A. Final Examination.

THURSDAY, NOVEMBER 14

THE ARCHITECTURE CLUB. Dinner at the Savoy Hotel.

FRIDAY, NOVEMBER 15

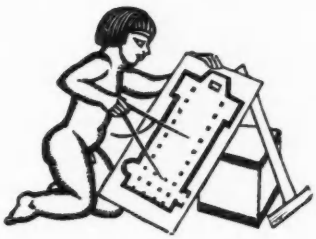
ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. "Romance of Lead in Industry." By E. Holden, F.COLL.H. **3 p.m.**



THE CHAPEL AT STOWE SCHOOL: THE ENTRANCE PORTICO.

The new chapel at Stowe was the last important building to be completed from the designs of Sir Robert Lorimer, whose death occurred on Friday last, at the age of sixty-five. It is a peculiarly characteristic work of its author, and shows his ingenuity in combining the old with the new. The largest of the temples in the grounds, the Temple of Victory and Concord, designed by Kent, had fallen into disrepair, and sixteen of its flanking columns were taken to form the arcading of the new chapel. The woodwork of the old private chapel of Stowe House has been incorporated in the organ gallery and chancel panelling of the new chapel. A special appreciation of the work of Sir Robert Lorimer appears on page 417.

THE ARCHITECTS' JOURNAL



WEDNESDAY, SEPTEMBER 18, 1929

THE ABBEY DEFACEMENT SCHEME

"*There must be no tampering with the structure of Westminster Abbey.*"—Daily Mail.

IF proof were needed of the widespread extent of public satisfaction at the decision to suspend for a time any further action in the matter of Westminster Abbey sacristy, it may be found in the wholehearted manner in which the daily papers have declared themselves. In no uncertain tones the *Daily Mail* voices in particular the Empire-wide significance of what it sums up as "The Abbey Defacement Scheme." The Dean and Chapter as custodians of "this most splendid of our national monuments" hold it in trust for the nation, and national feeling in the matter declared that "there must be no tampering with the structure of Westminster Abbey." Moreover, it is emphasized that the present scheme "has been condemned by all competent judges who examined the model building erected on the site chosen. Nearly all the bodies concerned in maintaining the historic traditions and artistic memorials of the metropolis . . . have registered their indignant protests. . . . The proposed sacristy would . . . be a wholly undesirable excrescence. Not to Londoners alone, but to all Britons, in these islands and overseas, the great church at Westminster has a sanctity even beyond that which belongs to most cathedrals. It is too intimately associated with the life-story of the nation to be profaned by a modern and incongruous outbuilding."

In other phrases the *Morning Post* expresses that same important, if accidental, fact that the Abbey "enshrines so much of English history and English national sentiment that every stone of it is precious. Its shortcomings are as sacred as its beauties. . . . The whole is something from which nothing can fittingly be taken away, and to which nothing can be fittingly added." Tribute is justly paid to the worthy manner in which in the past the Dean and Chapter have fulfilled their stewardship over this unique fabric, with suitable recognition of the unofficial but important influence which, in the circumstances, must be exercised by public opinion. "In the present day, it would certainly be worse than a blunder to ignore such an influence," while "If public opinion had been supine and indifferent on this question of building a sacristy it would have been an ill symptom." The strong recommendation is made that during the three months' respite "the presumption should be not for but against this proposed new building, and the needs which it is intended to serve should remain unsatisfied if they can be satisfied only at the expense of the dignity and æsthetic integrity of the Abbey."

While the *Daily News* appears to take a somewhat different view as to the respective positions of the proposers and opposers of the scheme, it does so evidently by way of helpful warning to those who may be inclined to a vague and inconclusive opposition unstrengthened by constructive suggestion or valid bases for objection. Despite the compliment of a brief biography and a portrait of the Dean in the paper's "Who's Who" feature, it stresses the force of public opinion by entitling its leader "The Dean Yields"; and opens its discussion of the matter by the announcement that the Dean "has at length climbed down." In other words, he has no doubt risen in popular esteem.

Finally, we may quote the admirable *Times* leader, in which is summed up, with forcible clarity, the position of the reasonable, fair-minded majority of people who "do not presume to maintain that Westminster Abbey has no need of a sacristy and ought to go on doing without one. They do not presume to maintain that the present age has neither the right to add to the Abbey nor the artistic power to add to it worthily. They do firmly maintain that the site chosen by the Dean was ill-chosen because a building put up on it would hide what is one of the most beautiful and one of the most unrestored poritons of the North front . . . not with something beliveed to be still more beautiful, but with something purposely made void of character and significance." It is pointed out that the Dean's consent to delay "shows that even his laudable ambition to get a sacristy for the Abbey, and to get it quickly, does not outweigh his need to feel that the nation and the Empire are at one with him in the work."

NEWS & TOPICS

"A SERIES OF BRIGHTONS"?

DURING the present heat-wave it may be no great allurement to hear that Torquay's sunshine record for the first six months of this year exceeded that of thirty-one towns in England, though I cannot say that the news left me cold. The fact remains that the popularity of the South Coast is not merely undiminished, but has actually increased this season. Public attention was, of course, focussed on Bognor, now proudly Bognor *Regis*, earlier in the year, and later a million spectators were expected at places bordering the Schneider contest course. But there is also an ever-increasing influx of ordinary and extraordinary holiday-makers at all times of the year, and the ranks of invalids and residents on the Channel coast do not grow smaller. It is noteworthy that the stretch of old and new seaside places and their few intervening undeveloped neighbouring portions of cliff and downland, from Dover to the Devon coast, is now being envisaged as a more or less complete entity from the town-planning point of view. A foreigner visiting England for the first time might well express astonishment that the comprehensive appellation "South Coast" has been hitherto rather a mere geographical and climatic term than a title of merit or of admiration such as the Riviera or the Cote d'Azur enjoy. There is still food for somewhat anxious speculation as to what will happen to that lower edge of England. From some angles the projects of dealing with the South Coast and the Devon coast by large-scale schemes of improvement, preservation, and development may seem a little akin to locking the stable door behind a horse thief.

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From the point of view of actual building-covered areas the South Coast towns and villages have already become mere links in a continuous chain. However well aware of this one may be, it is nevertheless something of a "startling fact" when one reads in Mr. Clunn's opportune book on *Famous South Coast Resorts* that "from Goring-on-Sea and West Worthing to Lancing, Shoreham, Brighton, Rottingdean, Peacehaven, and Newhaven, covering a distance of over twenty miles, one never loses sight of the straggling conglomeration of houses and bungalows connecting these various towns. Similarly, Hastings is linked with Bexhill and Cooden for a distance covering nine miles; Folkestone with Sandgate and West Hythe for six miles; Bournemouth with Christchurch and Poole for ten miles; and Torquay with Paignton for six miles. . ." And yet this very fact of continuity offers its own possibilities of appropriate co-ordination producing a unity in diversity—a complete "South Coast" without fear or monotony, or of catering for one type of visitor or resident exclusively. It is scarcely likely that "a series of Brightons," such as the *Glasgow Herald* suggests, will occupy the whole coast in the future, even if methods of development in particular resorts should rival the attractions of the *plages* across the Channel. The present straggling growth, trimmed and trained in time, is much more likely to become a coastal border of very diverse, but harmonious and mutually helpful, units, like the bright and varied flowers composing a sunny herbaceous garden border. There are still persons to whom classical concerts are worth more than casinos; and there must still be provision for bath chairs as well as sun-bathers.

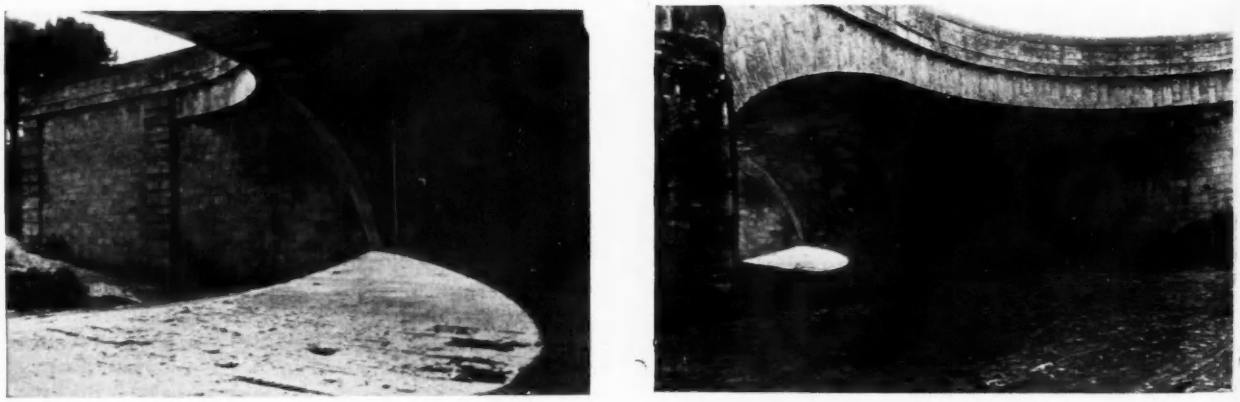
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A BRIDGE FROM THE RIVER VIEW-POINT

Owing to the extremely dry season and the excessive heat the River Loire has been reduced in places to a series of very shallow streams between wide stretches of sand-banks. Photographs of the bridge at Tours which have been sent to me lately were taken from the dry bed of the river, and show the constructional beauties of the bridge from an unfamiliar angle. The inverted arches which are normally under water, are exposed in places, and the fine simplicity of the lines of abutment can be fully appreciated.

THE ETHICS OF RIVER DIVERSION

Swinburne has written somewhere—though both observation and sentiment seem more appropriate to a hymnologist—that "even the weariest river winds somewhere safe to sea." The increasingly exasperating "weariness" of the little Rivert Alt—which expresses itself in capricious windings that are rapidly eroding the flat Lancashire coastline near the Liverpool suburb of Blundellsands—is to be cured by a drastic purge of dynamite. These changeable meanderings of its tired and restless spirit do even more harm by adding to the seabed of the Mersey estuary as silt the sand they wash away from the dunes, whereby the cost of the incessant dredging necessary to keep open the fairway leading to the Liverpool docks is very considerably increased. That is why the graceful, but baneful, sinuosities



Two views beneath the arches of the bridge at Tours.



The bridge at Tours, looking towards the town.

of the languid Alt are to be curtailed once and for all by confining its bed to the strait-jacket of a new channel specially blasted for the purpose. From the practical point of view there is much to be said for this apparently high-handed action of the County Palatine for constraint of the hitherto undisputed riverain right of the obstreperous Alt to indulge in *Wanderlust* at its own sovereign pleasure. Exploding it unceremoniously into a fresh channel will cost only about £1,000 as against anything from £20,000 to £140,000 for the necessary regulation works which would have to include the construction of training walls, embankments and groynes. There are undoubtedly several other larger schemes of this nature which would yield very useful results in land reclamation and provide work for some thousands of the unemployed. The neighbouring Ribble and Dee estuaries furnish two examples; the many rivers debouching into the Wash another, the Humber between Sunk Island and Spurn Head a fourth, Poole Harbour probably a fifth, the Solway possibly a sixth. Perhaps the most obvious case where there is a crying need for making a short cut in the course of an important English waterway is across the horseshoe bend of the Thames round the Isle of Dogs, a reach which presents considerable difficulties to navigation. But as some of London's largest docks and its main sewage outfall station have been built within this loop of the river it is too late to think of excavating a by-pass channel through that curiously named peninsula.

COUNTRYSIDE COMPLAINTS AND CURES

I am not sure that it is altogether wholesome for the ordinary citizen to read Sir Lawrence Weaver's diagnosis of the condition of England, although it may be a timely warning against shirking the greater issues and fussing over the lesser ones. "Outdoor advertisement and the roadside shack," he says, "are skin diseases of the countryside . . . obvious and highly unpleasant, but curable. Bungaloid growths . . . are capable of amendment or destruction. But the wrong planning of building areas is a deep-seated disease of bone and artery, which will defeat the architectural surgeon and physician alike." If we grow too much accustomed to suffer in silence the lesser irritations we shall soon find ourselves in a state of paralysed incapacity to recognize the warning pain of evil symptoms of the more permanent wrongs. But while the ordinary person has his responsibility for the prophylactic measures against the ills that the countryside is heir to, it is hopeful to watch such larger efforts at right planning as that of Lord Iveagh in his development of his Walton and Cobham estates. The scheme of development here is to be governed by deliberate regard for the preservation of amenity, with rural peace and quiet as an ideal not incompatible with "economic common sense." Harmony of external design is to be assured by the fact that a single architect is responsible for designing all the houses on the estate, thus avoiding one of the commonest transgressions of taste and tranquillity. Perhaps, however, there is some hope of a more general consciousness of the importance of architectural harmony, now that we have at last asserted our sense of civilized decency by condemning noise. If we now prosecute rattling lorries, shall we not sooner or later fine discordant buildings?

TREES

Two signs of grace I noticed during the week-end. One was the planting of trees over the bleak desert resulting from the making of a large new waterworks in a remote country place. The other was a pleasant little boulevard walk where a series of council cottages have been lately finished. An avenue of trees by the roadside had not been cut down, but survived with a grass footway beneath its shade, and the row of cottages were set back behind it. Elsewhere, too, a friend commented with surprise and pleasure upon the survival of two or three fine old trees between bungalow gardens and the country road.

RURAL ROOFING

By their roofs we shall know them, whether they be good or whether they be evil—the houses of this generation. And not the houses only, but other buildings, such as village halls and golf club houses. That buildings of the latter kind can be beautiful and "rural" as well as suitable was demonstrated by the illustrations of the thatched roof of Tandridge Golf Club house in the pages of this JOURNAL recently. Some of the best among the smaller country houses and cottages of today are roofed economically and comfortably as well as "picturesquely" with thatch, as were their forerunners of past centuries. Yet, because of all our modern contrivances, our electric lighting, and our theories of "safety-first," we are apt to be more careless than our fathers, with dips or paraffin, some people are banning thatch as dangerous. ("Have not houses roofed with other materials, by the way, ever been known to catch fire?") And if thatch, by its nature, is more likely than slates or artificial tiles to suffer from stray sparks, there are certain common-sense precautions, such as chimney sweeping, and certain simple scientific methods of treating the thatching material, which, as explained by a *Times* correspondent, minimize the inflammability of a thatched roof. Its many practical, economic, and æsthetic advantages make it desirable that thatch should be "cleared of reproach." It is interesting, by the way, to notice that in various corn-growing districts new buildings are still being thatched and old ones patched and re-thatched with wheat straw in the old traditional manner; while the Norfolk reeds are still seen in districts where they have been used for years and years, ready for the hand of "that very great personage the thatcher." And, only a day or two ago I passed a brand new pictorial signboard on an Essex village inn, proclaiming in no uncertain colours that the house was proud to be called "The Thatcher's Arms."

ASTRAGAL

THE MIDDLESEX HOSPITAL REBUILDING SCHEME

DESIGNED BY ALNER W. HALL

The Middlesex Hospital has a long and varied history of great work behind it. When vital decisions had to be made on the question of whether "to repair or rebuild," the faith of those who now control the destinies of the hospital and their belief in its future was such that, without hesitation, they decided unanimously in favour of the great scheme of rebuilding. In this issue we illustrate the first important section of the work to be undertaken: the west wing.

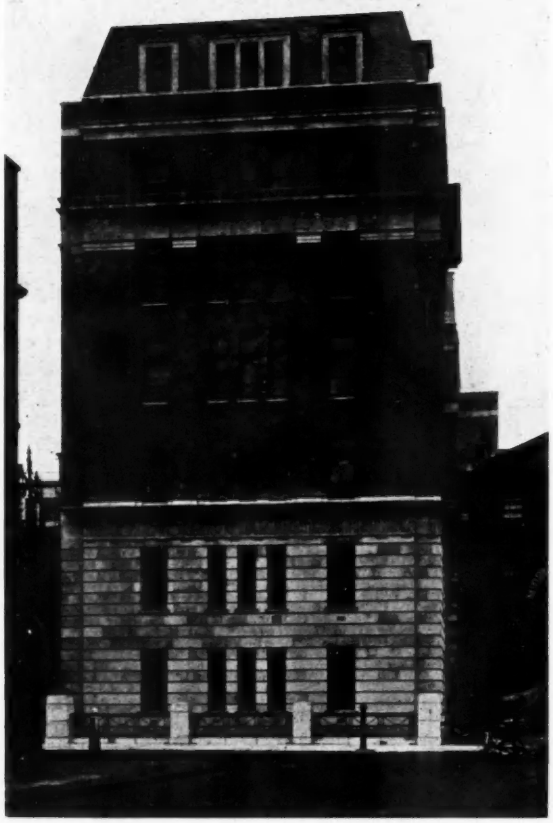
TO understand the present position of the hospital it is not uninteresting to look back into past history, especially in connection with the buildings themselves, as even in the earliest days great consideration was paid to the housing of staff and patients. Elaborate laws were introduced for the conduct of the hospital, and many changes were made in these to improve the accommodation for patients according to the needs of the times.

The original hospital consisted of two small dwelling-houses in what is now Windmill Street; this was in 1745, the houses being acquired from the owner Mr. Goodge, whose name is perpetuated in an adjoining street. Mr. Goodge was one of the first Governors of the hospital.

In 1747 the Governors' body established the first Lying-in Department in England—an interesting fact (which should be remembered these days), having regard to the very great importance to the community of all work in connection with maternity.

For ten years or so work was carried on as best it could be, but it was clear that additional space was urgently required; therefore, in 1755, after prolonged negotiations, a site was acquired from Mr. Berners and the foundation-stone of the new buildings was laid in that year by the Earl of Northumberland, the President. Thus was started, on the site on which it now stands, the new Middlesex Hospital. The plans of the new building were prepared by Mr. Paine, an architect of repute, one of whose principal works was Old Kew Bridge. As a contrast between those times and today the contract price for the first section, which was the centre portion only of the hospital, was £2,250, and the time taken to build it was 2½ years! The building was opened for patients in September 1757. The contract price for the present west wing, the first section to be rebuilt, was approximately £200,000, and has taken two years to build. The first addition consisting of the west wing (now demolished and rebuilt) was built in 1770, and the second or east wing was added in 1780.

In 1789, following violent criticisms of London hospitals by a gentleman of the name of John Howard, the Governors carried out extensive "repairs and cleansings," which would indicate some ground for Mr. Howard's criticism. In 1791 a momentous event took place. One of the surgeons, A. W. Howard of Argyll Street, informed the board that a friend of his wished to give a sum of money to endow a ward for cancer patients. Thus was founded the Cancer Charity, now the Middlesex Cancer Hospital. In 1796 the name of the generous donor, Mr. Samuel Whitbread, was divulged.



The west wing now nearing completion is the first important section of the hospital to be rebuilt. The photograph shows the end facing Mortimer Street.

Between 1793 and 1814 part of the hospital was given up to the housing and nursing of French emigrants, both lay and clergy. Evidence of this occupation was found recently when making alterations, a door being found with an inscription indicating this as being the entrance to the emigrants' wards.

A number of eminent architects have been from time to time appointed to the hospital. In 1791 Mr. James Wyatt was architect, and he was followed by his nephew, Lewis Wyatt; then Sir William Richardson held the appointment for two years, being followed in 1833 by Mr. George Basevi, who added to both wings southwards and also designed and carried out the medical school buildings on the north-west corner of the site. Mr. Basevi was followed by Mr. Thomas Henry Wyatt, who was, at one time, President of the R.I.B.A., and received the Royal Gold Medal. During his term of office many important alterations and additions were made to the buildings, and every endeavour was made to bring them up to the requisite standard of the times. As an example of this, it is interesting to note that Mr. Wyatt designed the first home for nurses in which every nurse was provided with a separate room, an innovation the importance of which cannot be overlooked, tending as it must have done to improve enormously the comfort and happiness of the nurses.

Mr. Wyatt on his death was succeeded in 1885 by Mr. Keith D. Young, a pioneer in hospital architecture; he revolutionized many of the details of hospital planning throughout the country, and his work has been copied and followed by hospital authorities and architects for many

[By Alner W. Hall

The West Wing, Middlesex Hospital.]

A view from Mortimer Street of the south-west and south fronts. The new wing is eight storeys high, and contains a central lift and water tower. In the new wing are administrative offices, surgical and gynæcological units, theatre suites, and Accommodation is provided for two hundred patients. a children's unit with a large open balcony.



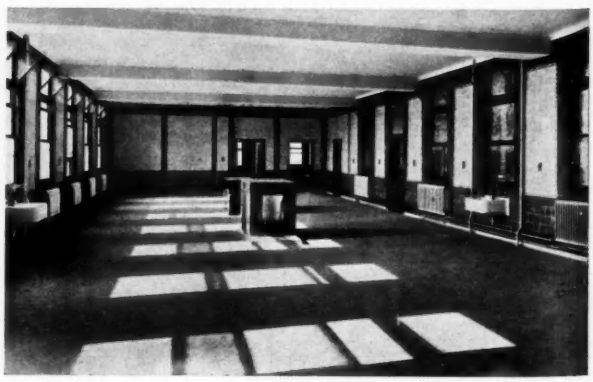
The Mortimer Street front showing the new west wing. Further work to be undertaken includes the rebuilding of the centre portion and the east wing, and the provision of a complete neurological unit.

years. During Mr. Keith Young's tenure of office great alterations and additions were made to the hospital buildings. Many of these will remain as part of the complete scheme; the buildings such as the cancer wing, the medical school, residents' college and nurses' home, and the Bland Sutton Institute of Pathology are all still so modern that they can be used as designed or are capable of being easily converted, if required, to other purposes.

It has fallen to Mr. Alner W. Hall, Mr. Keith Young's partner and successor as architect to the hospital, to design and carry out the great scheme of reconstruction. It was some five years ago that Mr. Hall discovered the very serious defects in the construction of the floors of the old building, and following his report the hospital authorities instructed him to make the preliminary sketches for rebuilding.

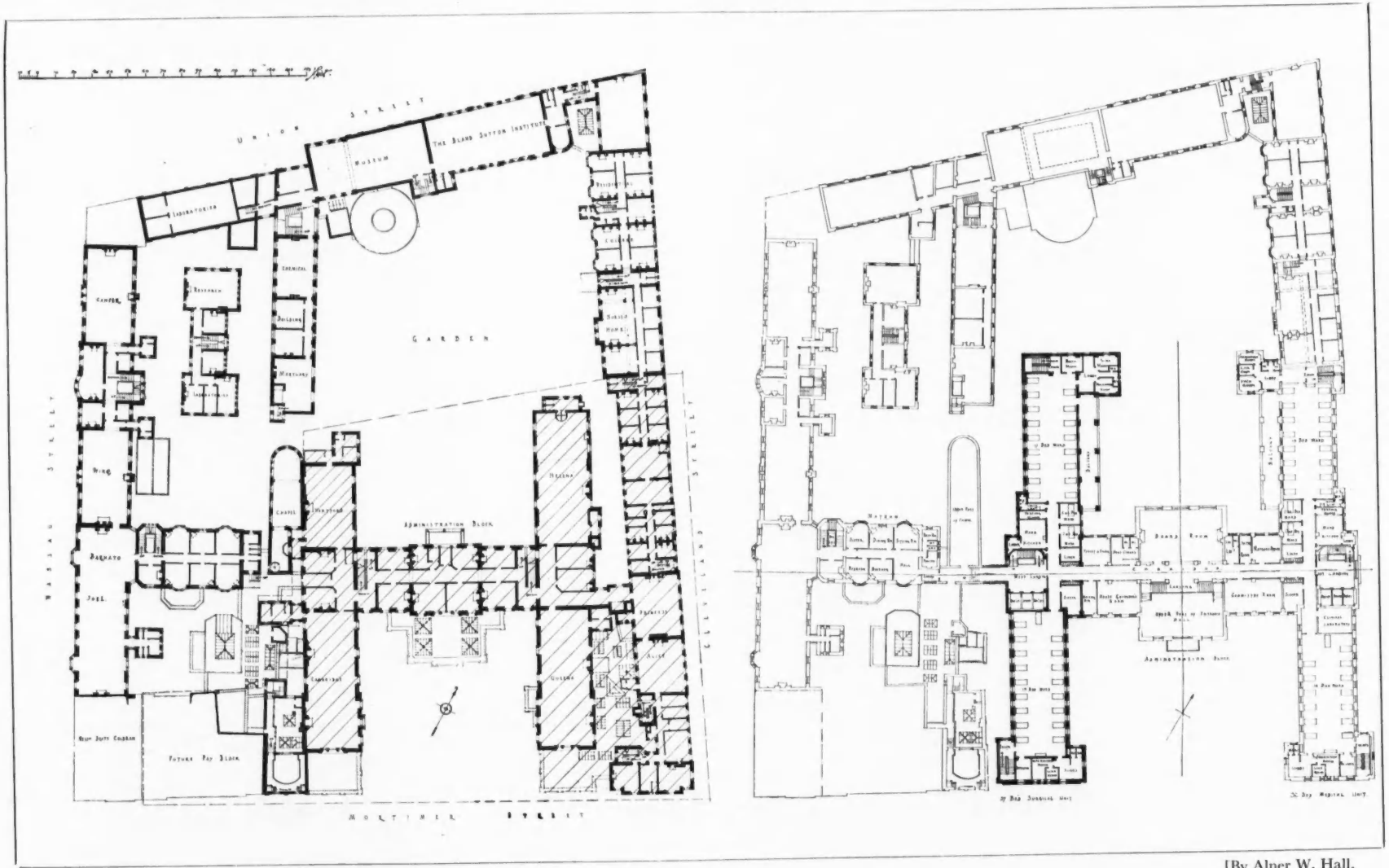
Two years ago work was started on the west wing, the first section to be rebuilt, and this should be completed this October. During the last two years, as a preliminary to the complete scheme, the central boiler house has been built, the hospital annexe converted for patients and





The West Wing, Middlesex Hospital.] *[By Alner W. Hall.*

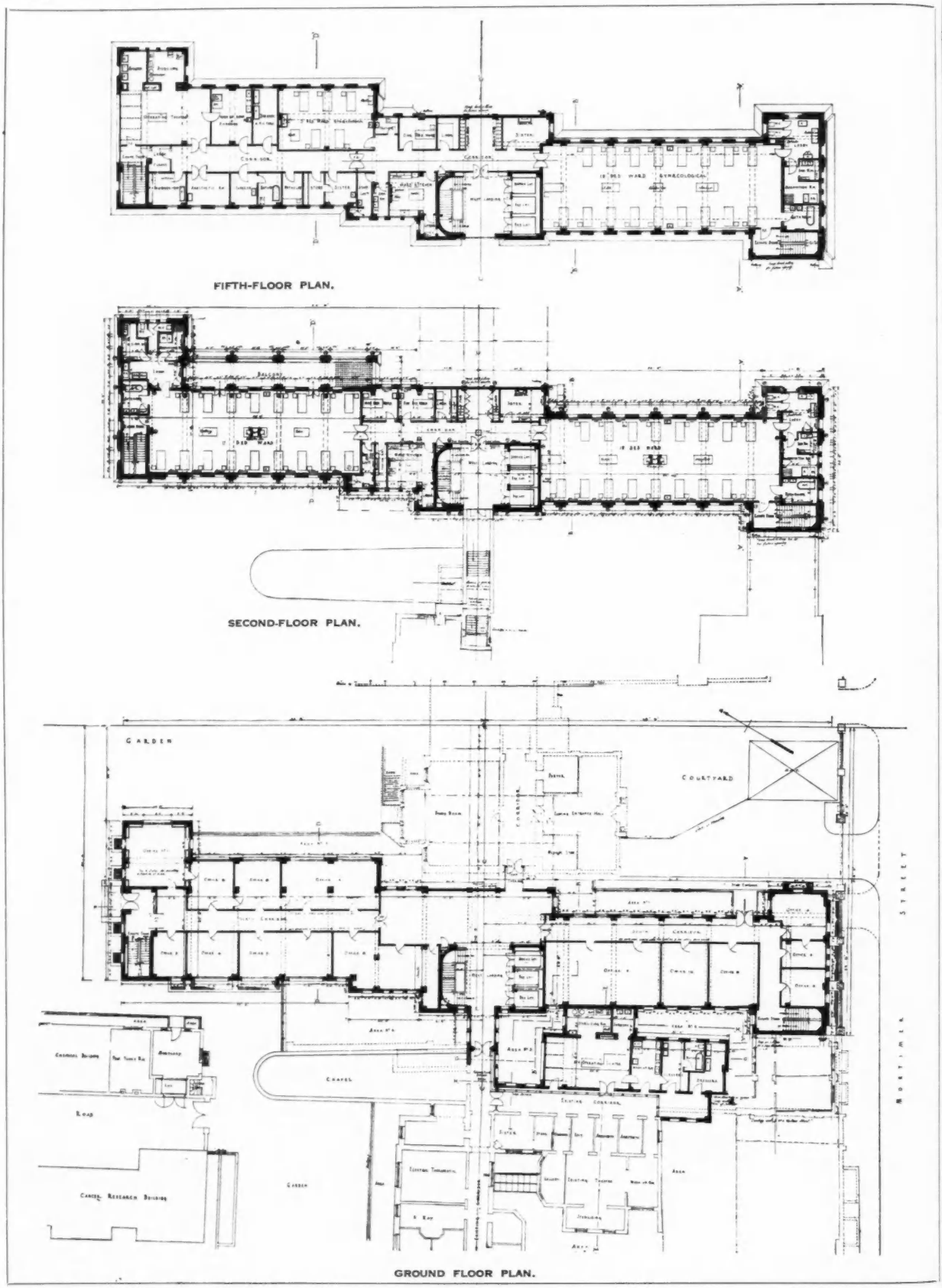
A balcony, and one of the wards. The materials used have been selected to eliminate so far as possible the usual heavy annual bill of repairs and re-decoration. The whole wing is tiled from floor to ceiling. The ward units have different schemes of colour decoration, but the staircases and corridors are given a uniform treatment.



[By Alner W. Hall.

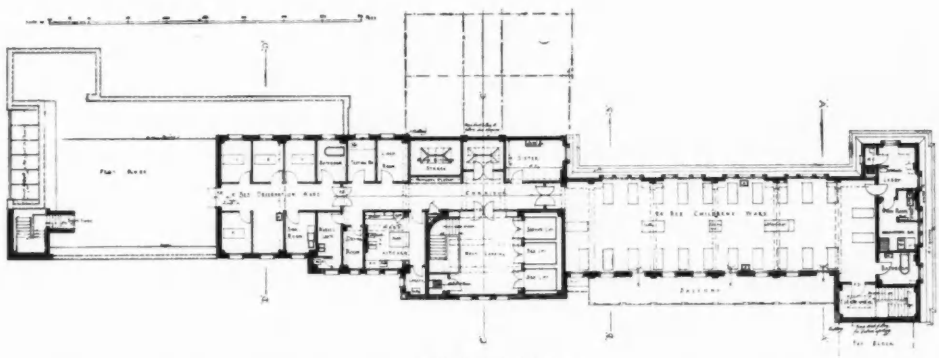
The West Wing, Middlesex Hospital.]

First-floor plans of the hospital as it was and as it will be. The centre portion is planned to contain the main entrance-hall and chief administration offices. During the last two years, as a preliminary to the complete scheme, the central boiler house has been rebuilt, the hospital annexe converted for patients and out-patients, and the first section of the nurses' home has been started; but the west wing illustrated herewith is the most important work to be tackled to date.



The West Wing, Middlesex Hospital.] [By Alner W. Hall.

The ground-, second-, and fifth-floor plans of the west wing. The first four storeys above the ground floor are planned each as one complete surgical unit of thirty-seven beds, with sisters' room, ward kitchen, linen store, etc.



SIXTH-FLOOR PLAN.

The sixth floor of the west wing, the plan of which is shown, contains the children's unit with a large open balcony facing west. Accommodation is provided for twenty-four cots and four observation wards.

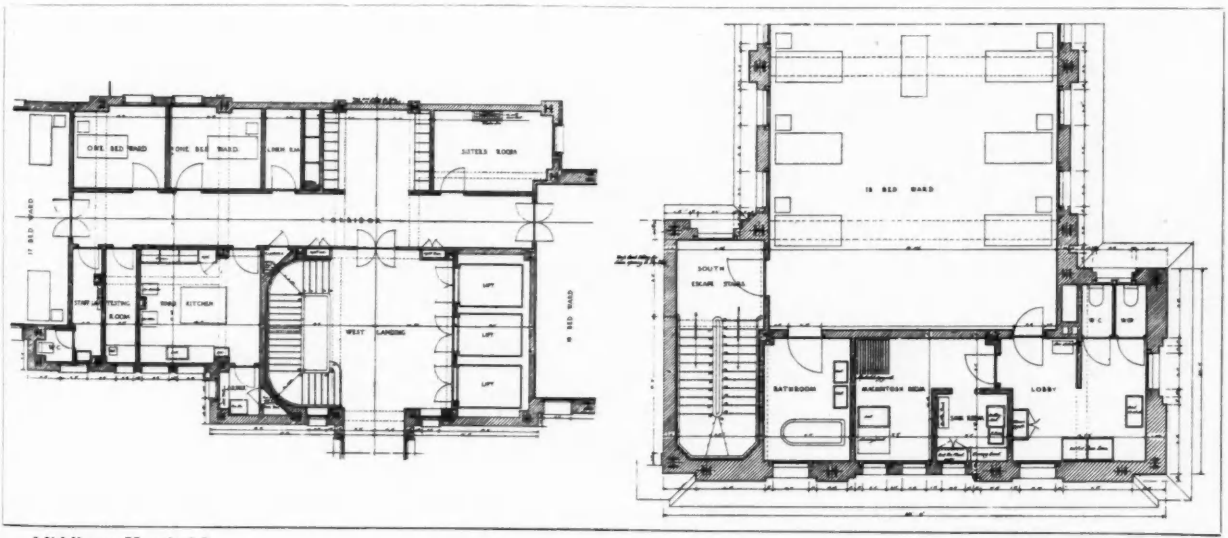
out-patients, the first section of the nurses' home has been started and should be completed this year, and it is proposed to start the second section almost immediately.

The west wing consists of a block, eight stories in height, with a central lift and water tower. The basement contains ample accommodation for stores of all sorts. The ground floor is planned to take some of the principal administrative offices. The first four floors above the ground are planned each as one complete surgical unit of 37 beds with sisters' room, ward kitchen, linen store, etc. The fifth floor is planned to take a complete gynæcological unit, with all the necessary ward adjuncts. At the northern end there is a self-contained theatre suite consisting of a large operating theatre, wash-up room, surgeons', dressers', sisters' and nurses' rooms, and an anæsthetic room immediately opposite the theatre. A small pathological room is also provided. On the sixth floor is planned the children's unit for 24 cots, and four observation wards, with a large open balcony facing west. The wing accommodates in all 200 patients.

To complete the rebuilding of the old hospital, there remains the centre portion and the east wing. The centre portion is planned to take the main entrance hall and offices. On the first floor the board room and principal administrative offices; on the second floor is planned a large clinical lecture theatre and adjuncts; the third floor is planned to take a complete X-ray diagnostic department, in touch with both medical and surgical wards; on the fourth floor is to be placed a complete eye unit with theatre and adjuncts; on the fifth floor is planned the remainder of the operating theatres, and on the sixth floor the main central kitchen with direct access to both west and east wings.

The east wing when completed, takes: on the ground floor casualty and admission department; on the first four floors medical units; fifth floor maternity unit, and on the sixth floor throat, nose and ear unit, with theatre suite complete.

There are a number of other important additions to the general scheme, which will be carried out shortly. First is the provision of a complete neurological unit, and secondly the adaptation of existing buildings facing the garden to provide very full accommodation for some sixty paying patients' wards.



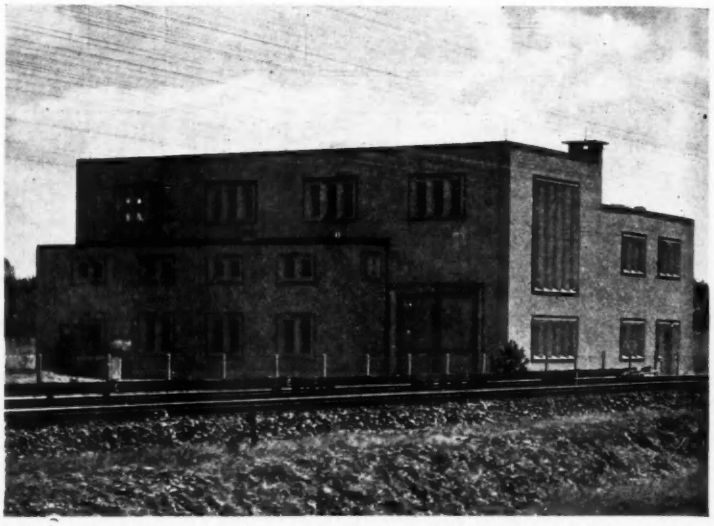
Middlesex Hospital.] [By Alner W. Hall.

First-floor plan of the west landing, and second-floor plan of the south sanitary block.

RECENT GERMAN RAILWAY ARCHITECTURE



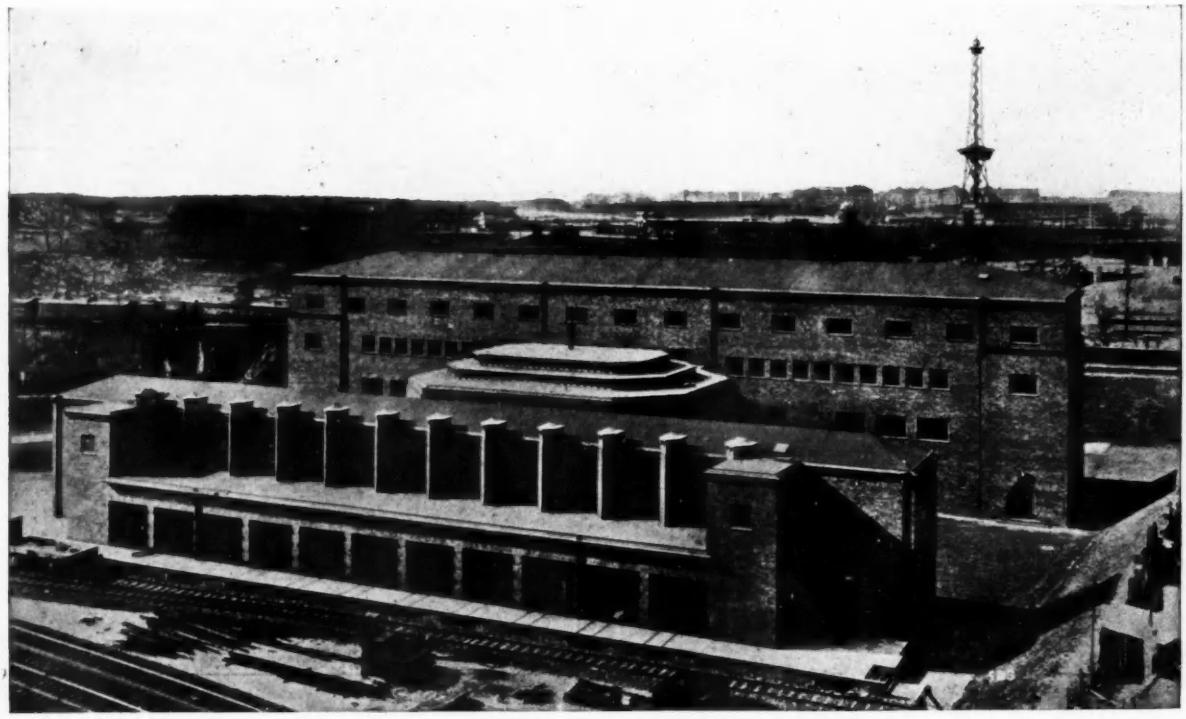
Signal cabin and gantry at Erfurt.



Reinforced concrete substation on the Stettiner Bahnhof-Oranienburg section of the Berlin electric suburban lines.

These three photographs, reproduced by the courtesy of the *Reichsbahn Gesellschaft*, show typical examples of German post-war railway architecture. The signal-box and gantry at Erfurt is a reinforced concrete structure, with brick infillings, which spans four sets of metals and looks remarkably like a travelling telper. The double-faced clock placed on the near corner of the widely protruded roof cornice is of a type, now standard on the Reichsbahn, in which a single conventional sign, a thick stroke like a letter I, indicates all the hours instead of the usual numerals. The all-concrete, stucco-finished Berlin suburban sub-station is a very compactly planned and carefully fenestrated building.

In the large brick transformer station at Halensee, on the Berlin *Ringbahn*, the buttressed effect of the first floor of the nearer and lower building, as though it were a step mounting in significance to the higher one beyond, is undeniably architectural.



Transformer station at Halensee, Berlin electric suburban lines.

THE LATE SIR ROBERT LORIMER

An Appreciation

WITH the death of Sir Robert Lorimer an era of Scottish architecture comes to an end. The intensive study of old work which Sir Rowand Anderson and his school had promoted, led to the growth in some of the younger men of a talent at once more gracious in quality than that of their predecessors and more unconsciously permeated with the native tradition. No other could have offered fuller scope for the plastic sense in mass and detail that was Sir Robert Lorimer's great gift and raised him to pre-eminence in his own sphere.

Robert Stodart Lorimer was born in 1864. His father was a professor of Edinburgh University and Kellie Castle, his home in Fife made a fitting nursery for a future architect. His career began in the office of Sir Rowand Anderson, whose pupil he was for nearly five years. After travelling in England and working with Bodley for eighteen months, he returned to Edinburgh in 1893 and started in practice. By the early years of this century Lorimer's work had become known to everyone interested in architecture. A succession of works in the happiest spirit of the Scottish vernacular, rich in fancy and masterly in detail, had won the confidence of his clients and the unbounded enthusiasm of the budding architects of the day. For the Scottish contingent in London he was their champion, their answer to Lutyens. They might just admit that Lorimer had an equal but certainly no superior.

The works by which he made this reputation were for the most part domestic, and in character Scottish Baronial. That term has been used to describe so many travesties that it has a dead and ugly sound. But in the hands of Lorimer it came alive. Ardkinglas and Dunderave in Argyllshire, Formakin in Renfrew, Pitkerro, Briglands and a score of other alterations and restorations proved that the old style could be used without any sense of impropriety when it was handled with understanding.

In 1909 Lorimer was selected as architect for the chapel of the Knights of the Thistle at St. Giles Cathedral, and this work brought him fame and a knighthood. This small building achieves a remarkable air of magnificence. In perfection of workmanship and in intricacy and richness of detail it would be hard to name its equal in modern times. Lorimer inspired—one might almost say created—a band of carvers in wood and stone such as no other architect could command. They went from one job to another like the medieval craftsmen, and they helped to give Lorimer's work a sense of continuity. In the stalls of the Thistle chapel and in the staircase newels of his houses can be seen small animals full of expression, yet barely released from the wood from which they are carved.

Less well known than the Thistle Chapel is his Roman Catholic Church of St. Peter in Edinburgh. It was built nearly twenty years ago, but the interior is still fresh and modern in feeling. Lofty round-headed arches in white-washed brick, a barrelled and coffered ceiling in wood, combine with a certain spacious bareness to give a sense of refreshment and to allow the fullest value to a tall altar-piece rich in colour and ornament.

After the war, when the creation of a National Scottish War Memorial was resolved upon, it was generally felt that Lorimer was the man for the task. His first project however, raised a storm of protest. He bowed before the weight of public opinion, scrapped his design, and produced a fresh one. It was completed only two years ago and is too well known to require description. Architectural opinion is strongly divided on its merits as a design, but there can be no question of its appeal to Scottish people as a whole. Its mass actually improves the silhouette of the Castle Rock. In the published drawings and even in the photographs the odd mixture of Gothic and Renaissance detail may readily be found disconcerting, but I find it hard to believe that anyone could actually see it without being moved by the conception and the manner in which it has been carried out. The reverent care and perfection of workmanship and material displayed in every part and detail is unmistakable.

Only a few weeks ago his latest building, the new chapel at Stowe, was opened. Judging only by photographs it did not seem to be in his happiest vein, but his work always improved on closer acquaintance. Lorimer's principal work was accomplished before present-day tendencies in architectural design had become apparent. He was fortunate in being able to work in his chosen style without the distracting if stimulating ideals of modernism, and his work must be judged by its own standards. Today no man of his calibre could disregard the changed conditions, so that his death does in a very real sense coincide with the end of a phase of national architecture. J. M. E.



The late Sir Robert Lorimer.

THE ARDEE MENTAL HOSPITAL COMPETITION

BY OUR CRITIC

First Prize-winner : Henry T. Wright, Newcastle-upon-Tyne.
Second Prize-winner : William Naseby Adams, London.
Third Prize-winners : Beckett & Harrington, Dublin.
Assessor : George P. Sheridan.

ANYONE who has viewed the schemes submitted for this competition at the Technical School, Dundalk, where they were hanging during the assessment and for four days afterwards, will, I think, join with me in paying a tribute to the secretary of the Louth County Council, Mr. Charles McAlester, for the perfect lighting he has secured for each drawing. It was perhaps excusable that, after a weary twelve hours' journey, one more than half expected to find the lighting indifferent and the hanging poor. But no competitor need fear any longer that his drawings were "stuck up behind the door." The arrangement was excellent.

In obeying that almost involuntary impulse to see the winning scheme first, one had to pass in this case before the second scheme, submitted by Mr. Naseby Adams, of London, and it was some time before a move was made elsewhere. Two things strike one immediately. First, that this scheme has the distinction, possibly shared with Messrs. Colcutt and Hamp, of having undoubtedly the most ably presented set of drawings in the room, a strong pull in view of the fact that several of the schemes suffered from being exceptionally poorly executed. And secondly, to English eyes this was unquestionably the best scheme from the viewpoint of architectural effect.

But the qualification is unfortunately necessary. For I do not think (and here I should be very surprised to learn that I am wrong) that the author of this design visited the site beforehand. Had he done so, I do not think he would have committed himself quite so irrevocably in his detail to bricks and tiles in a locality where whitewashed rubble and slates and thatch are, outside the towns, almost the only materials to be seen.

The firm who submitted the design placed third, Messrs. Beckett and Harrington, of Dublin, owe their position almost certainly to a large extent to their sympathy with local materials. For, setting aside the rather disagreeable appearance always presented by uncoloured photo-print drawings, it can be easily seen that with a good stone and pleasant window detail their design would fit most admirably into the countryside.

The winning design in its general effect commits itself very little to definite materials, although the detail allows for brick with stone facings. It is presumed that the material will be changed to stone when the building goes forward and the rather conventional detail of the doorway modified to suit local tradition.

Study of the various plan forms submitted show clearly the wide difference of opinion as to the best solution of a problem dealing with an institution of this type. But there are really only two distinct methods of dealing with the requirements of a mental hospital. First, the radial scheme with a central administration and blocks of dayrooms and dormitories spread over the site, whether connected or not with the main portion, on a sort of "garden colony" system, which is certainly, or at least presumably, pleasanter for the inmates. Secondly, there is the compact "institution" type, comparatively in one block, which is cheaper. As in this case the conditions gave the limit of expenditure desirable, it was obvious that the more economical scheme was the better one on which to work ; and the majority of competitors submitted designs on the closely connected principle, in which they were supported by the opinion of the assessor, Mr. George P. Sheridan.

But sympathy is felt for the authors of two able designs on the widespread system, of which one especially, from Nottingham, the name of whose author unfortunately blew overboard in the Irish Sea, would almost certainly have been awarded a high place had the assessor considered their method the better one.

Comparing the first two plans as being typical of the compact type, one recalls the dictum of one assessor of some experience that good plans can be told by their small amount of corridor and by their appearance on the block plan. In this connection the winning scheme gains by its compactness and by the fact that the flanking male and female wings are joined to the main block by one corridor only, while the second scheme appears to require three. Another small point which strikes one is the fact that the winning scheme, and that placed third, have shown on the elevational drawings the levels both before and after the erection of the building, while the second scheme, although showing them carefully on the block plan, has treated them as of secondary importance on the elevations.

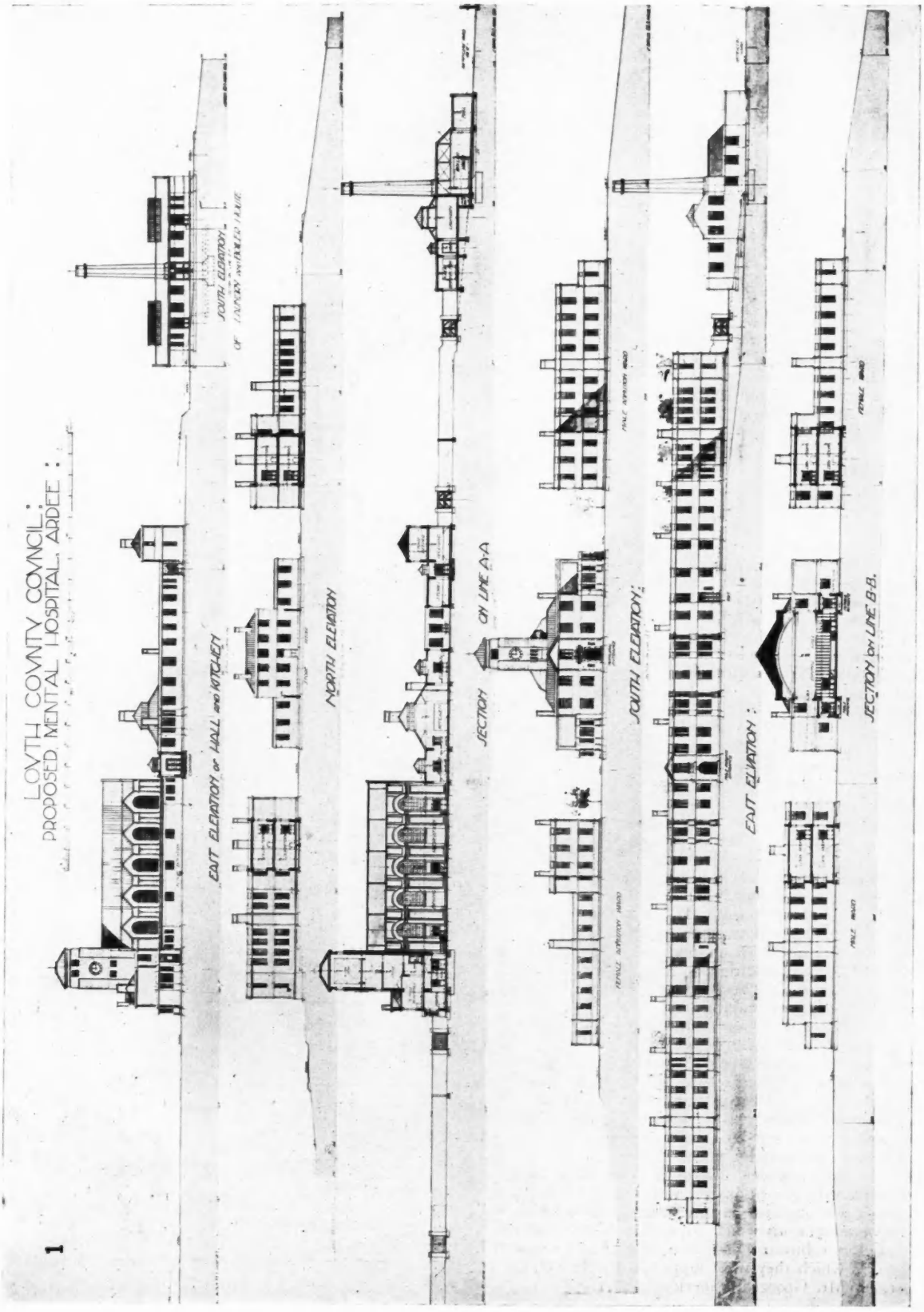
But that a final standard plan form for institutions of this type has not yet been reached is perhaps shown by the remark of a gentleman who is medical adviser to a body which is, I believe, the Free State equivalent of our Lunacy Commissioners, who stated that in his opinion no mental hospital dayroom should be elsewhere than on the ground floor. The scheme awarded first place shows four dayrooms on the first floor, although exceptionally easy access is provided to the ground floor by adjoining staircases.

I should like to express sympathy with Messrs. Colcutt and Hamp as the authors of a very able design incorporating a dormitory plan four beds deep. The writer has discussed the subject with an official of some experience, who stated that, in spite of prejudice against this type as being unhygienic, they are by far the most economical to work. The Irish are, however, conservative in matters architectural, and real appreciation of a design expressing so well the modern Continental attitude towards work in concrete is perhaps a cultivated taste.

The total number of schemes submitted was thirty-four, of which some fifteen came from Great Britain.

* * *

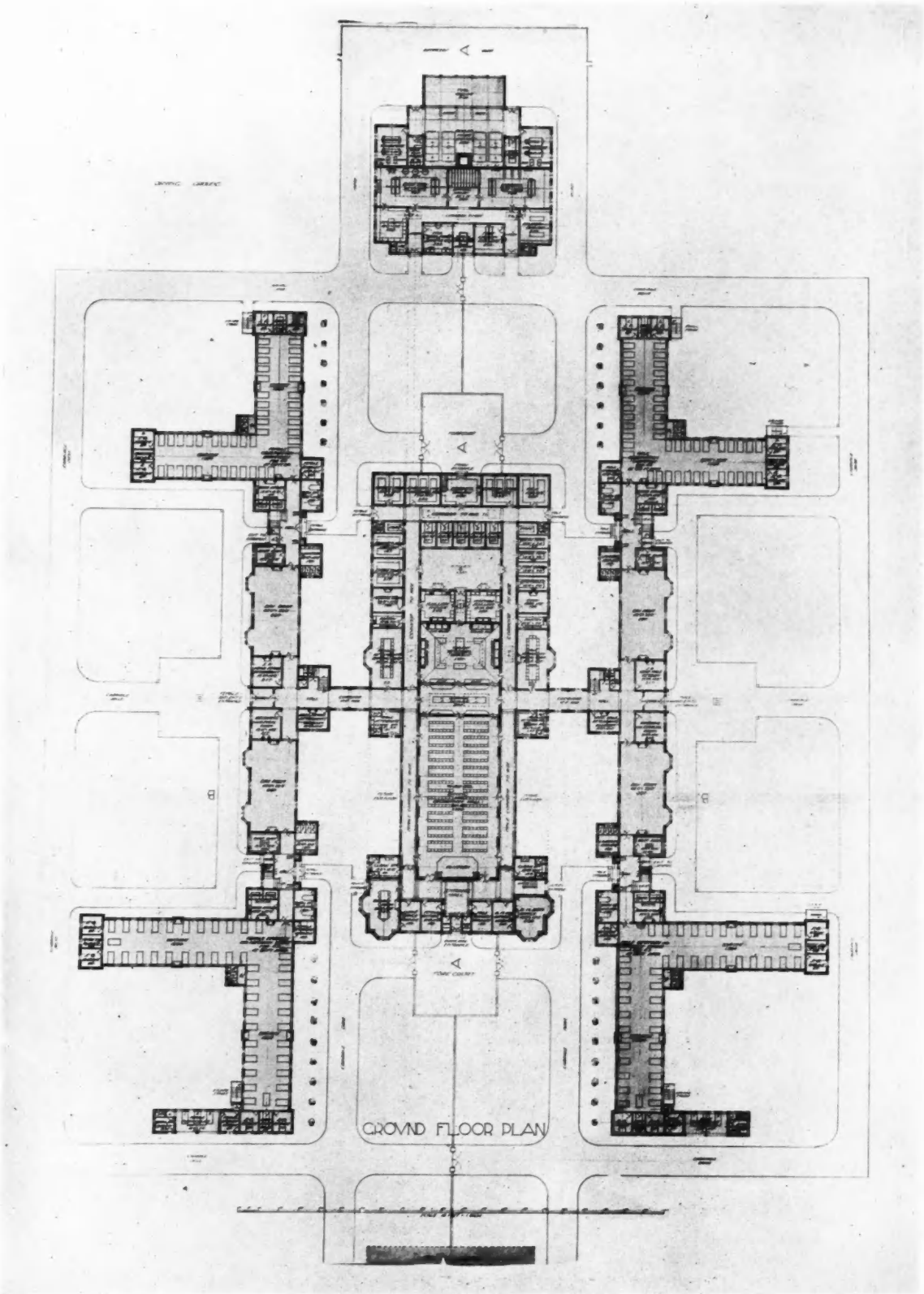
Mr. Henry T. Wright, the winner of the competition. in his report suggests that most probably local materials and methods will be used in the erection of the hospital, For his design submitted, he meanwhile suggests that the external facings might be of sand-faced, deep-red bricks, and the doors and windows and the quoins of all angles of dove-grey brick. The flat roofs he suggests could be of concrete carried on steel joists, reinforced with expanded metal, and covered with asphalt ; and the pitched roofs of hand-made sand-faced tiles. The materials suggested for the interior of the hospital are as follows : Wood block floors on 4 in. concrete, fibrous plaster ceilings and Austrian oak panelling. Electric light and gas for cooking and laundry purposes are suggested, and heating on the low-pressure accelerated hot-water system. Each ward in the hospital is designed to accommodate forty-five patients at 80 ft. super per bed. The combined dining and recreation room will accommodate 250 persons.



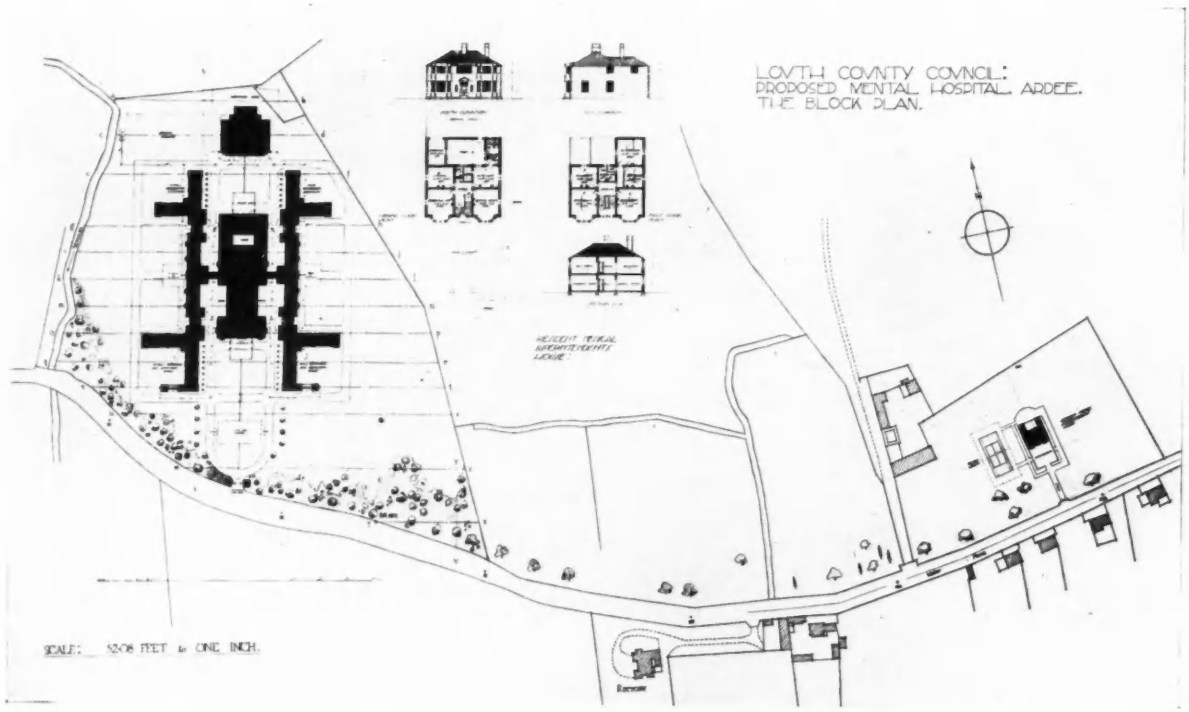
Ardee Mental Hospital Competition. The winning design. By Henry T. Wright. Elevations and sections of the hospital, and of the laundry and boiler house. The main building, containing the administration offices and the dining and recreation hall, has been designed with a clock tower as the chief architectural feature of the scheme.

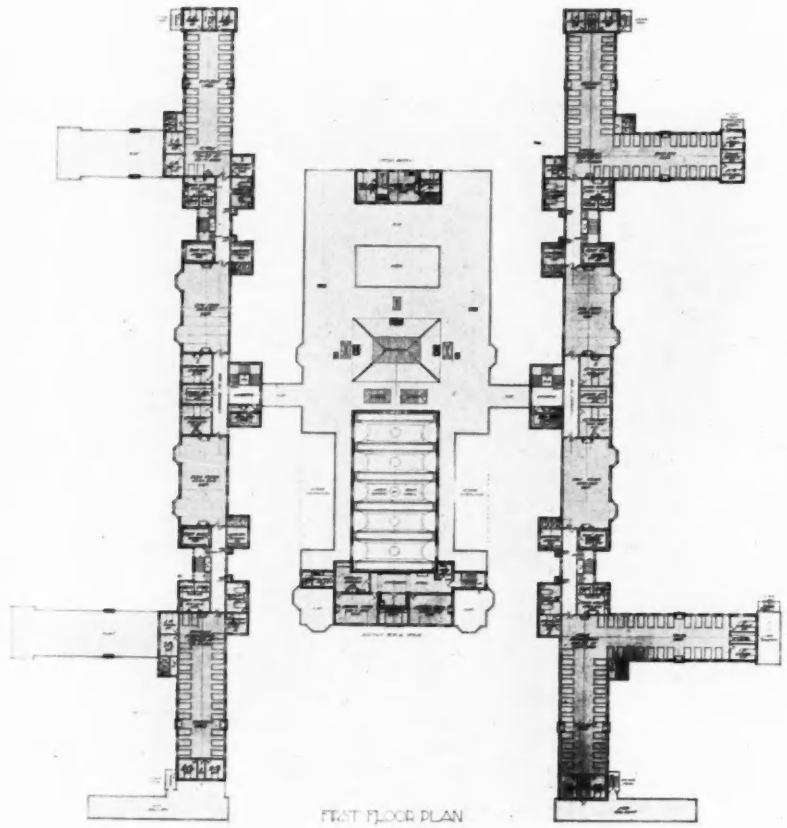


Ardee Mental Hospital Competition. The winning design. By Henry T. Wright. The principal entrance is approached from a spacious forecourt and leads to the administration offices and the dining and recreation hall.



Ardee Mental Hospital Competition. The winning design. By Henry T. Wright. The ground-floor plan. The main building is planned in the centre of the site, and is flanked on each side by the wings for the male and female patients. Each wing is joined to the main block by one corridor only. At the rear of the site are the laundry and the boiler house.





Ardee Mental Hospital Competition. The winning design. By Henry T. Wright. The block plan, and plans, elevations, and section of the resident medical superintendent's house; and the first-floor plan of the hospital.



ENGLISH PRECEDENT No. 82

THE MARKET CROSS, SOMERTON, SOMERSET

This interesting survival of the sixteenth century combines two features—i.e. the stepped market cross at the centre, and the arcaded shelter. The ingenuity of medieval construction is combined with the newer treatment of plain segmental arches with keystones.

The smaller towns of Somerset which are not served by the main roads have escaped the spoiler's hand. Not only is the Market Cross at Somerton unique, but it is a fine example of a structure repaired intelligently.

—[A. E. RICHARDSON.]

THE HONEYWOOD FILE

BY KARSHISH

XIX: The District Surveyor Again

Sir Leslie Brash, the client, has expressed great satisfaction to his architect, James Spinlove, on the progress made, and has mentioned that he "anticipates" being able to move into the house before the contract date of completion. Spinlove has given exact directions to the builder, Grigblay, to build the tiled roof in fantastic imitation of the irregularities of medieval work, and Grigblay has objected that the work asked is of a special character not covered by the contract.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 10/7/25

It gave me great pleasure to know that you are so well satisfied with the work that has been done, but I think I ought to tell you that you must not expect to get into the house *before* the contract date. There has been delay from frost and bad weather and also that arising from alterations in the plans, and this lost time will unavoidably delay completion. The interior represents the greater part of the work, but I am satisfied with the progress Grigblay is making.

I enclose list of grates and sanitary fittings. Will you let me know, when I see you, whether you would like to choose any of these? The prices are those included for in the contract.

Yours sincerely,

SPINLOVE TO GRIGBLAY

Dear Sir, 11/7/25

I agree to the omission on nailing tiles being set against the extra work you say I have asked for, but the method of roofing I described must be included. I do not agree that it is "special work." The whole of the work, I may remind you, has to be done "to the architect's satisfaction."

Yours faithfully,

Spinlove has once already tried to bludgeon Grigblay with this God-given power conferred upon him by the contract, and his second attempt will probably be as futile as was the first for Grigblay's claim is sound: the field of the architect's satisfaction is, of course, limited to the work described in the contract.

GRIGBLAY TO SPINLOVE

Dear Sir, 13/7/25

We regret we cannot accept your view that the special work in roofing you have called upon us to do is included in the contract, and we must respectfully ask you to note that we can undertake it only on the clear understanding that it is an extra. We will ask you to give directions to the carpenters and tilers on the spot, so that your exact wishes may be understood as these are not clear, and to note that we cannot accept responsibility for the soundness of this method of work, which is new to us. When we know exactly what is required we will give you estimate of the extra value of carpenters' work, and subsequently of the tiling. Yours faithfully,

This stiff letter is not remarkable if we consider the extremely provocative one to which it replies. We notice Grigblay's assumption of authority. We have before observed this, and found the explanation in Grigblay's sense of Spinlove's practical inefficiency. If Spinlove had the gumption to treat Grigblay as a colleague the interchange of such unpleasant letters would be avoided. Another builder might well have taken Spinlove's orders; made a dreadful botch of the roof, and brought in a heavy claim for extra at settlement; and Spinlove ought to be grateful to Grigblay for his plain speaking.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 13/7/25

I was extremely disappointed to conclude from your last communication that the house will not be completed till subsequently to the expiration of the contract date. I clearly comprehended that the contractor was under penalty to complete the house *previously* to the day designated. Surely the vagaries of our climate are an eventuality which the contractor must risk, and an alteration does not necessarily involve elaboration! I desire to be informed when the house will be ready for occupation so that we may make necessary arrangements.

I am obliged for the list of grates and conveniences. I will purchase them myself through the intermediary of an acquaintance who is in a position to secure them at wholesale trade discount prices. Yours sincerely,

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 15/7/25

The whole question of delay in building contracts is intricate and not readily to be explained in a letter, I fear, but the root of the whole matter is that, as the contract allows consideration for bad weather, extra work, strikes, etc., time is not of the essence of the contract. As a practical fact, the only security for prompt completion you have is the builder's care for his reputation, and you could not be in safer hands than Grigblay's.

Please do *not* buy grates or sanitary goods. The former have to suit the fireplaces which I am designing; and the latter have each to fit special conditions, so that it is absolutely necessary that all should be ordered by the builder after you have settled the pattern and price.

It will be of no advantage to you to buy at trade prices. The builder can buy at least as cheaply as you can, and he has already credited trade discounts in making up his tender. If *you* buy, the builder will be entitled to add a fair trade discount to his contract price and you will certainly pay more in the end. This matter of trade discounts is carefully safeguarded in the contract. The sums set aside for the various goods are the actual sums paid to the merchant and not, as I think you suppose, the catalogue retail prices. The builder has already included in his contract for packing, carriage, etc., and it will be impossible for me to prevent extras creeping in if those arrangements are upset. I hope I have succeeded in making the matter clear.

Yours sincerely,

He has, at any rate, had a good try! It would have been better if Spinlove had kept his explanations for Brash's ear, for his letter is likely to raise more questions than it answers. Spinlove, however, appears to enjoy writing letters, although he cannot always enjoy reading those he receives: the next on the file, for instance!

GRIGBLAY TO SPINLOVE

Dear Sir, 18/7/25

We are sorry to have to report that the District Surveyor refuses to pass the main drain to sewage tank on the ground that it leaks. As you are aware, there is a very sharp fall on this drain, and we used particular care in making the joints with waterproofed cement so that they should stand the pressure of water test which, between the second and third manholes, has a head of 52 ft. Only four joints showed a drop or two of water after standing several hours, and these have been remade to the Inspector's satisfaction; but water sweats out through the pipes themselves. It only shows in beads after standing for hours, and does not run, but Mr. Potch, the Surveyor, came down yesterday, and has condemned the whole drain. We shall be glad of your instructions.

The pipes are "tested" as specified and there is no flaw in one of them. Bloggs would have put on labourer to keep the pipes wiped dry against the Inspector's visit, he says, but he never thought objection would be made.

Yours faithfully,

We have already seen that, at a pinch, Bloggs can be depended on for "a bit of tack."

SPINLOVE TO GRIGBLAY

Dear Sir, 20/7/25

I have written to the District Surveyor on the subject of the drain.

Please take no further action of any kind, but keep the drain charged, and ask your foreman to mark standing level of water in manholes and keep the covers on. I will visit the site on Tuesday next.

I note the contents of your letter on subject of roofing. If Mr. Grigblay can meet me on Tuesday on this matter I should be glad. Yours faithfully,

Spinlove has come quietly to heel in this matter of the roof. It will be noted that the head of water gives a pressure, in the lower pipes, of nearly 15 lb. a square inch. The "tested" pipes are subjected by the makers to a hydraulic pressure of about 7 lb. a square inch.

SPINLOVE TO POTCH (Surveyor, Marlford District Council)

Sir, 20/7/25

It is reported to me that you have refused to pass the main soil drain at Honeywood. I shall be obliged if you will tell me: (*a*) the grounds for your objection; (*b*) the bylaw infringed; and (*c*) the work you require to be done.

Yours faithfully,

Spinlove has evidently not forgotten previous interchanges with Mr. Potch. He does well to remind Potch that his powers are limited by the bylaws. So many small builders and others forget this that Potch, in his ambition to flourish as a public terror, does not trouble to remember it.

POTCH TO SPINLOVE

Sir, 24/7/25

Honeywood drain loses water and must be relaid. *See Bylaws.*

Vent of settling tank to be replaced with 4 in. heavy cast-iron soil vent. *See Bylaws.*

I am surprised to be informed by my assistant that copy of our bylaws was sent you last year. As it is unfortunately lost I shall be glad to present you with a second copy to go on with on receipt of 1s. 2d., post free, as my Council disapproves of putting A.R.I.B.A.'s and others to the trouble to ask unnecessary questions.

I am, Sir, yours faithfully,

The insolent intention of this letter, although veiled by its illiteracy, is undoubted, and is just what Spinlove must expect from Mr. Potch, who, as has already appeared, practises privately as an architect in the district in which he operates in his official capacity, and so finds it to his interests to pile up official difficulties in the way of his private rivals. To irritate them into precipitate action, to their public discredit with the Council, is all part of his system.

SPINLOVE TO POTCH

Sir, 27/7/25

You must permit me to inform you that the Honeywood drain does not "lose water," as stated in your letter. After standing for three days fully charged the drop in level of water in manholes is scarcely perceptible—$\frac{1}{8}$ in. or $\frac{3}{16}$ in., not more, in fact, than would be accounted for by absorption and evaporation. The joints are perfectly tight and a slight sweating of water through the substance of the pipes is due to the excessive head of water imposed by the sharp fall in the ground. This condition of head would not arise in practice and the sweating would be of no consequence if it did. The pipes are Dallop's deep-socketed "Tested" and the best procurable. I have to ask you either to pass the drain or to say in what way the work can be improved, either as regards workmanship or materials.

There is no "Settling Tank." The thing you refer to is an anærobic tank; its successful action depends upon absence of air, and the ventilation pipe you call for would tend to spoil its efficiency by admitting air. The 1 in. galvanized pipe you object to is to prevent gases accumulating at pressure in the tank and breaking the seal of the trap, and was put in by my orders. Yours faithfully,

Spinlove does well to ignore the subtle offensiveness of Potch.

POTCH TO SPINLOVE

Sir, 31/7/25

I note you now admit water leaks through substance of pipes at Honeywood and which is the reason I stated drain leaks and must be relaid. Unfortunately, my inspector cannot wait three days at manholes to check figures, as he has other business as well. I am told drains sometimes get stopped. The water test is against that happening and not against it does not happen.

My Council does not expect of me to tell Institute architects where to get drain pipes, but most people know such trouble would be cured by treating with one or two coats of pitch, boiling hot.

I happen to be aware what a settling tank is and also all soil vents to be 4 in. heavy cast iron, *see Bylaws.* If everyone who did not agree with bylaws could do what he liked my Council would not have adopted same.

I am, Sir, yours faithfully,

Potch seems to know that Spinlove is young and lacking practical experience, for his pitch proposal, if not a joke, is a mischievous attempt to get Spinlove into worse difficulties or, at least, make a fool of him. The "boiling hot" pitch would crack all the pipes and it could not hold back water which is forcing itself, under a pressure of some 15 lb. to the square wide, through glazed earthenware. We may judge from the letter which follows that Spinlove fortified his opinion by discussing the matter with Bloggs.

SPINLOVE TO POTCH

Sir, 4/8/25

Your letters on the subject of Honeywood are clearly intended to avoid the questions I have put to you. In the circumstances I must ask you to note that the drain you object to demonstrably conforms with your bylaws, and it is of the best possible workmanship and materials, and that I claim on behalf of Sir Leslie Brash a formal certificate of acceptance from your Council.

I also have to ask you to note that your bylaws do not require that septic tanks should be ventilated, and that, as it is insanitary and against established practice to do so, I have no intention of ventilating the tank at Honeywood. Yours faithfully,

Spinlove is winning this tussle in fine style. Potch, of course, is only bluffing, and hedging, and obstructing; but Spinlove could scarcely arrive at the point of confidence in which, alone, he could write such a letter, without anxiety and stress. As I was led to remark on an earlier occasion, Spinlove seems to have "been there before," for in nothing does he show such decision and vigour as in thwarting the machinations of Potch.

SPINLOVE TO POTCH

Sir, 14/8/25

It is now ten days since I wrote to you stating the position I take on the subject of Honeywood drains and calling upon you for certificate of acceptance. As I have received no acknowledgment or reply, I have to ask you to note that unless I receive immediately a satisfactory answer, I must refer the whole correspondence to the Chairman of your Council, in which case I shall protest against the way I have been treated by their official and the offensive tone of the letters I have received.

I am, Sir, yours faithfully,

Good! Spinlove seems, in a previous existence, to have been a prize-fighter.

POTCH TO SPINLOVE

Sir, 26/8/25

Re drains at Honeywood. I have been busy and the matter is a difficulty, but have now decided to give you the benefit and enclose certificate, which, no doubt, meets with your satisfaction.

The vent to settling tank must be at your own risk.

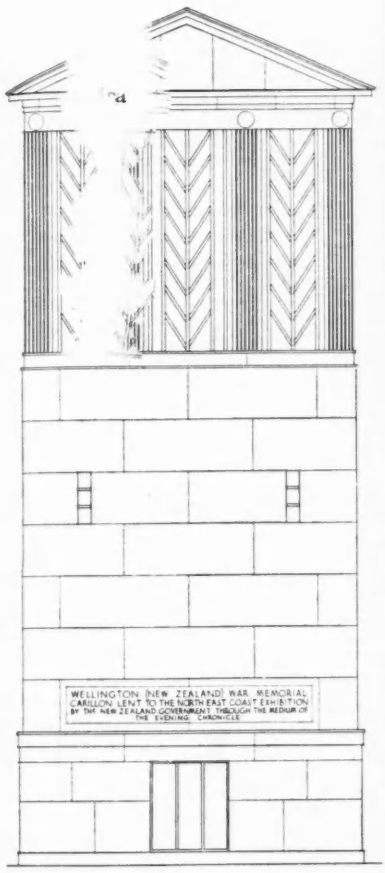
I resent your remarks and regret you should feel cause to make same as no intention on my part.

I remain, Sir, yours faithfully,

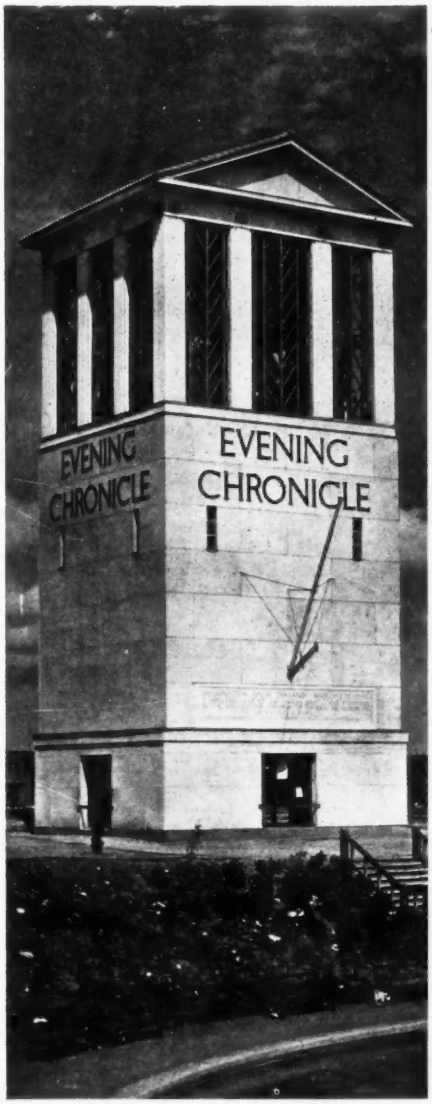
What Potch means by "vent must be at your own risk" he probably could not himself exactly say. He no doubt considers his last paragraph to be an ample explanation and apology. Much of the offensiveness of his letters is, perhaps, due to native ungainliness of mind. He is like a fox which cannot help smelling and is unaware that he smells.

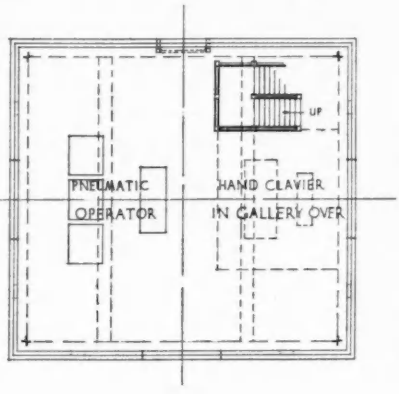
[NEXT WEEK: THE STAIRS GO WRONG.]

THE ELLINGTON (N.Z.) WAR MEMORIAL CARILLON

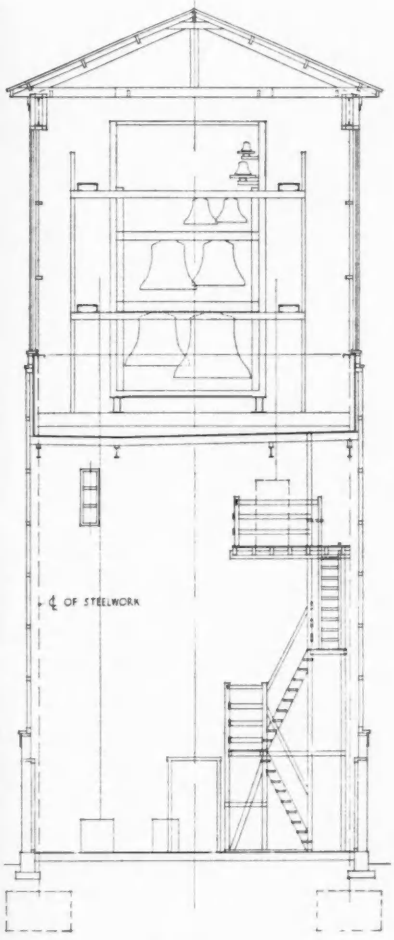


SOUTH ELEVATION





LOWER STAGE



SECTION

SHORTLY before the opening of the North-East Coast Exhibition the *Newcastle Chronicle* obtained permission through the New Zealand Government for the loan to the exhibition of the Wellington (New Zealand) War Memorial Carillon which had at that time just reached completion in the foundry of Messrs. Gillett and Johnston, Croydon. The date on which a definite decision was taken allowed only twenty-one days to make all arrangements for designing a campanile in which to house the bells; erecting same, and transporting the carillon from Croydon. Great stress was laid on the date of completion, which was to be that of the official opening day of the exhibition.

The carillon, comprising 47 bells and weighing 45 tons, was immediately dismantled and transported by sea to Newcastle-on-Tyne in two consignments.

In the meantime, plans were prepared by the architects, Messrs. Mauchlen and Weightman, of Newcastle, and the steel structure of the campanile was complete by May 1, the date of the arrival of the first consignment of bells at Newcastle quayside. Simultaneously with the hoisting of the bells into position, the clothing of the steelwork was carried out. Timbers were bolted to the steel frame and covered on the outside with fibre board, painted one coat of oil colour before erection, and secured with large flat-headed galvanized nails.

The belfry was constructed over a waterproof floor, and was composed of piers faced with fibrous plaster and the openings filled with a grillage of gilded wood. The roof was covered with Roman-pattern tiles.

The campanile was completed, and the carillon played on the opening day of the exhibition.

THE HOUSE OF WILLIAM BRUCE: II

An Architect's Home

And Its Influence on English Architecture

NO matter how many other people may be contributing their share in the erection of a building, owner and architect there will always be.

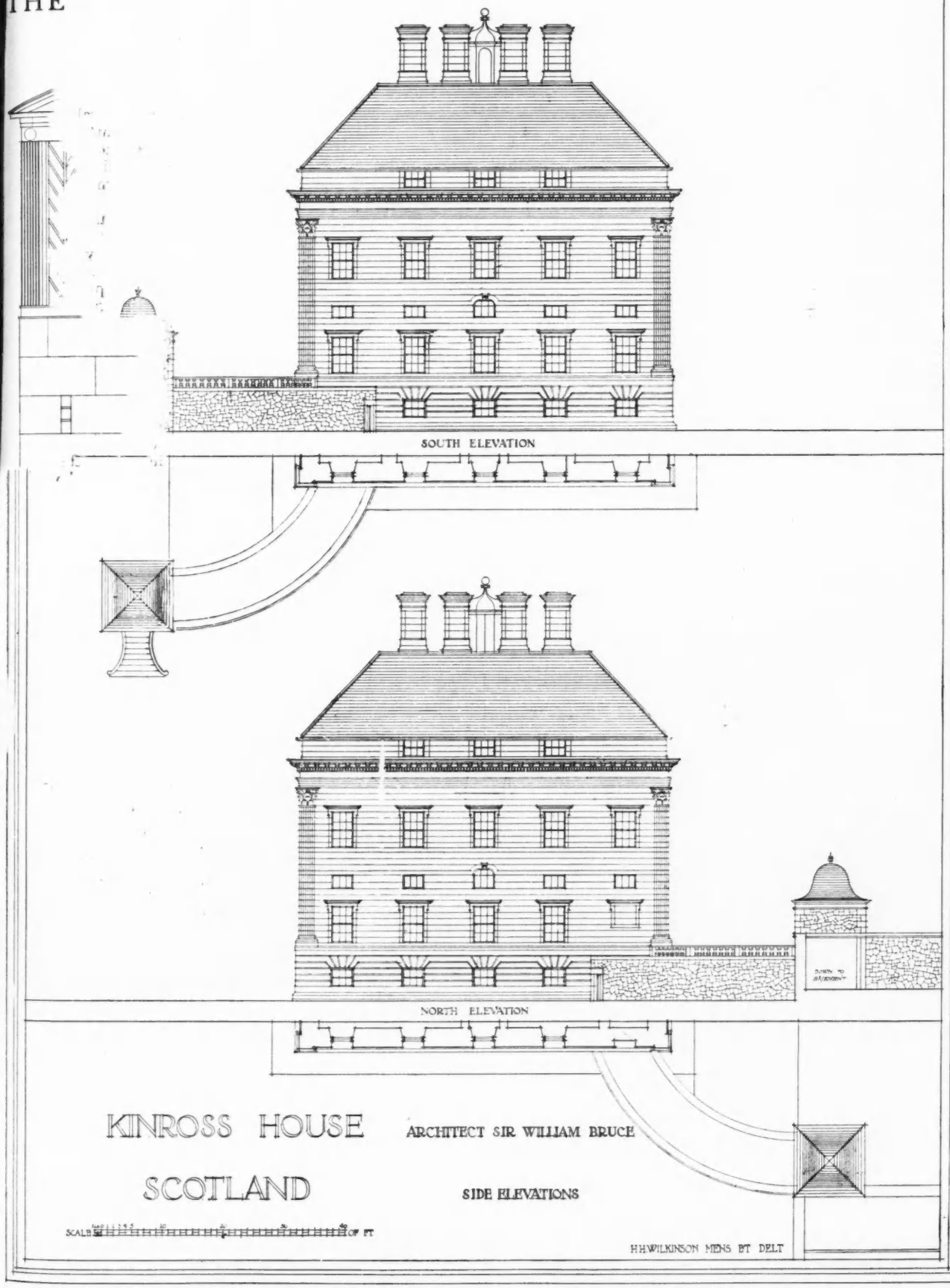
It is not necessary that we should "to the marriage of true minds admit impediments," and incomparably fine works of architecture have sprung from this particular union. But few architects can get rid of the feeling of diffidence and uncertainty that is brought upon them by the knowledge that their work is fed by a stream of money proceeding—or failing to proceed—from another man's pocket. Hence it is that the world contains so many buildings in which something important has been left out—buildings that lack a wing or façade that lacks a building. Where the cost is defrayed by a person other than the future owner and occupier, as it was at Blenheim, the hazard is even greater. Clearly a perfect piece of architecture can only occur where the owner's needs and resources are completely known at the start and unlikely to vary as the work goes on. This ideal condition is most nearly fulfilled when architect and client are united in the same person; but how many first-rate architects have been rich enough to become the owner of a considerable building? So few, indeed, that the house Sir William Bruce built himself on the shore of Loch Leven has nothing to equal it throughout the length and breadth of the British Isles.

Here, indeed, we may see an architect undertaking a design knowing precisely what he wanted to do and what were the resources that would enable him to do it. Kinross House was not the result of a sudden *coup* at the gaming tables; it was not paid for in inst ambitious upstarts or rel sidized by one Governm another. There was noth the architect or to tur from the course he had follow. It is not among our country houses, but enough to take the singularly place in seventeenth-cent tecture to which its conce it. If Wren or Vanbrug men of great mea by building hous made a serious achievements at Castle Howard. the other hand original creation, in the advance which none of s architec extensive works was able to play.



Kinross House was in process of erection from 1685 to 1690. It was designed by Sir William Bruce, the great Scottish architect (? 1630–1710), and, being built for the family seat, it bears his arms, crest, and monogram in various places on the exterior. Above, the south elevation. The main and garden fronts were illustrated last week.

THE



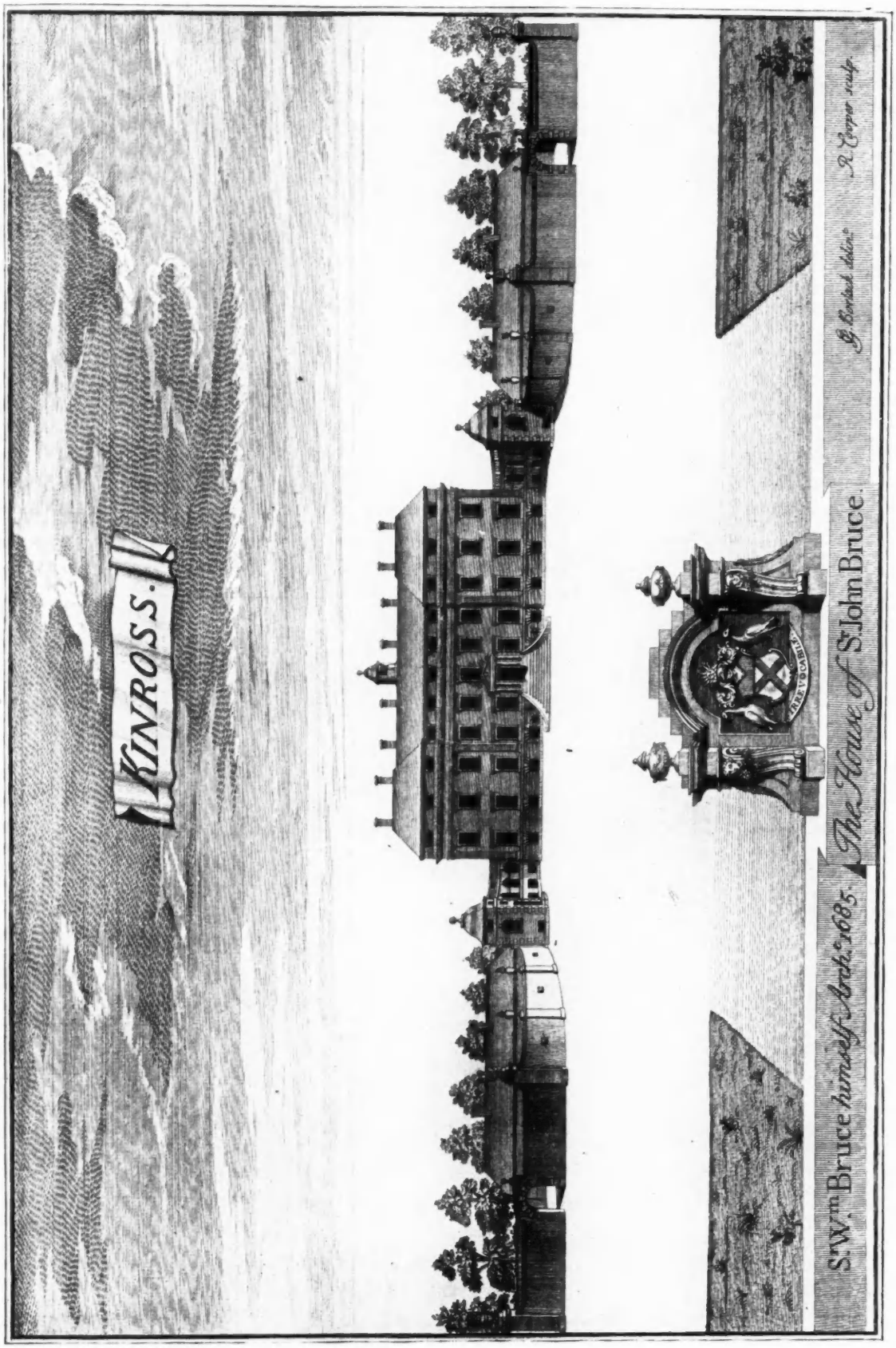
KINROSS HOUSE ARCHITECT SIR WILLIAM BRUCE

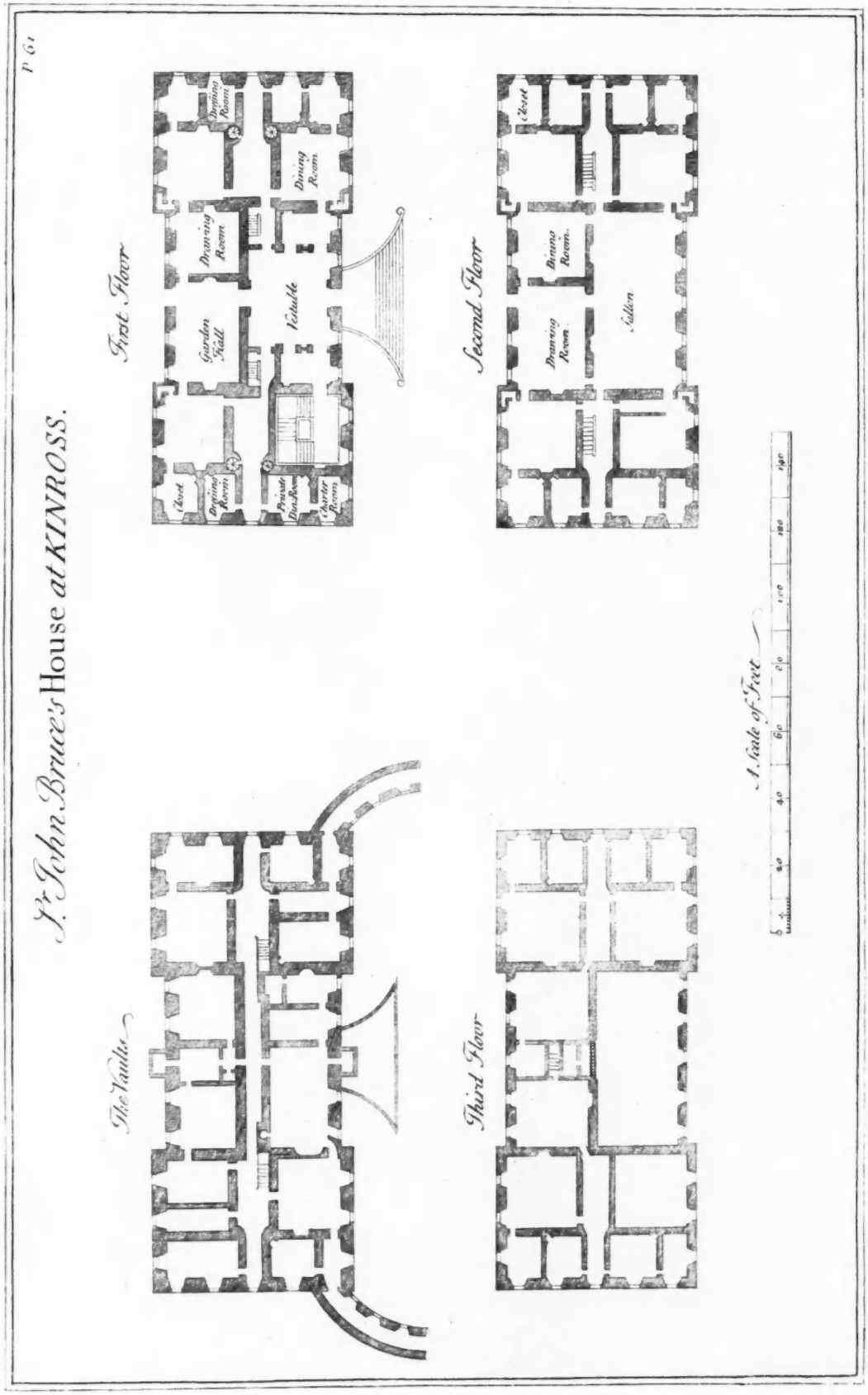
SCOTLAND

SIDE ELEVATIONS

SCALE

H.H.WILKINSON MENS ET DELT


KINROSS.
S.r W.m Bruce himself Arch.t 1685.
The House of S.t John Bruce.
R. Cooper sculp.


P. 61
Sr. John Bruce's House at KINROSS.
First Floor
Garden Hall
Drawing Room
Dining Room
Vestibule
Private Dressing Room
Closet
Second Floor
Drawing Room
Dining Room
Salon
Closet
Third Floor
The Vaults
A Scale of Feet

Bruce would hardly have contrived to build himself this remarkable house had he not been a great artist and at the same time a great man of the world. There are not many in whom these two activities reach a similar level of attainment. Like the painter, Sir Peter Paul Rubens, William gave serious thought to politics and world affairs generally, and made them an important part of his life. Born about 1630 he was fifty-six years of age when he began work upon the family seat, the land for which had then been in his possession for over ten years. His career had been about equally divided between the practice of architecture and the service of his King. "No gentleman in a private capacity," says Douglas's *Baronage*, "contributed more to bring about the restoration of Charles II." It was Bruce who won the allegiance of General Monk and brought the news of Monk's conversion to the King. From 1671 to 1679 he was busy on the Palace of Holyrood House, whose courtyard achieves such a striking synthesis of the Jones Whitehall tradition with the Continental manner shown in Lemercier's wing at the Louvre. In 1697 his arrest was ordered by the Government of William of Orange; and in 1707, within a few weeks of the signing of the Act of the Union, he was, in fact, a prisoner in Edinburgh Castle. He died in 1710. His most important work next to Holyrood Palace is Hopetoun House, near Queensferry, which he began for Charles, Earl of Hopetoun, in 1696, a design made familiar to many by the curved wing connections which are convex instead of concave, as was usual in other houses. He also designed Moncrieffe House, near Bridge of Earn, Perthshire; Leslie House, Fifeshire, and Mertoun House, near St. Boswells. In the building of Drumlanrig Castle, Dumfriesshire, he had an important share, though one not hitherto very clearly defined. And Mr. Christopher Hussey has recently suggested that he may have designed the charming entrance front of Caroline Park, Midlothian, for Lord Tarbat.

[*To be continued*]

R.I.B.A. Maintenance Scholarship

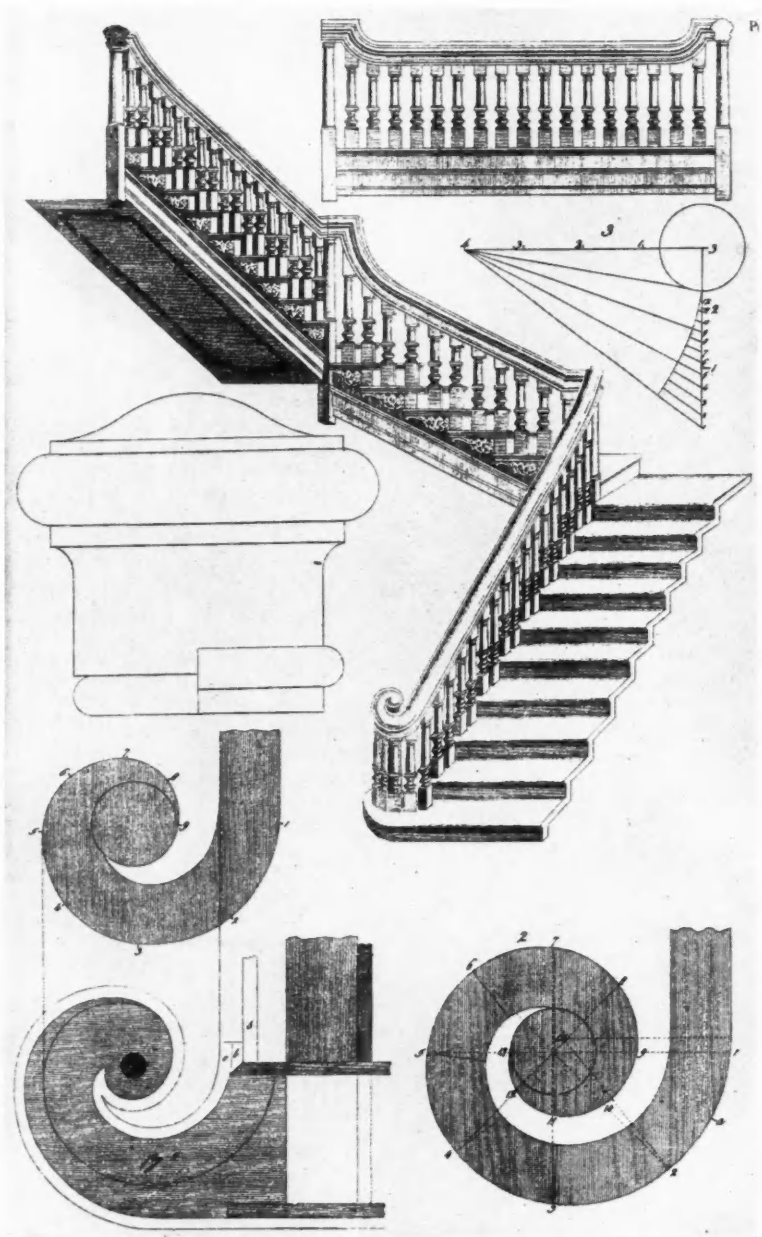
The R.I.B.A. fourth- and fifth-year maintenance scholarship has been awarded to Mr. G. G. Laidler, of the School of Architecture, the Architectural Association, London. The scholarship is of the value of £100 per annum, and is tenable in the fourth and fifth years at a School of Architecture recognized by the R.I.B.A. by a student who has already completed satisfactorily a three-years' course in a recognized school.

LITERATURE

EIGHTEENTH CENTURY DECORATION

From the lavish sowing of a more leisured age the student of today can reap a harvest of good things, such as those offered him in the series of reprints of which *Interior Decoration of the Eighteenth Century* is a recently revised volume. It is remarkable that much of the design of the eighteenth century is still applicable to the needs of our own day. Even though, theoretically, mouldings are now anathema, and the fireplace must give place to the radiator, no modern contrivance has so far replaced the staircase in the smaller private house, while in hotels, flats, and shops the lift itself is often an excuse for panelling and enrichments of that period, and restaurants and cinemas inherit the glories of Georgian drawing-rooms.

The plates in this book, however, are not necessarily intended for the practitioner, whether engaged in new or in



Details of a staircase with cut string, wreathed handrail and curtail step.
[*From* Abraham Swan's Interior Decoration of the Eighteenth Century.]

reconstructional design. Their primary purpose is obviously to serve the needs of the architectural student seeking information, precedent, and inspiration. Few aids could be more straightforward than the details of mouldings in Part II. The staircase drawings and details are perhaps the most notable contents of the book, and the infinite variety of baluster design in the final plate leaves no doubt as to the needlessness of unimaginative monotony in mouldings. Examination of the treatment of walls and whole rooms has added interest in the light of the information as to Abraham Swan's methods and theories of proportion presented in the compiler's brief foreword.

The plates have been chosen by Mr. Arthur Stratton from Swan's four works, dealing respectively with *Staircases*, *Designs in Architecture*, *Designs in Carpentry*, and *Designs for Chimnies*, which appeared in the twenty years from 1745 onwards. The volume is a valuable addition to the growing collection of reprints of eighteenth- and nineteenth-century architectural drawings and literature.

V. M. C.

Interior Decoration of the Eighteenth Century, from the designs of Abraham Swan, selected by Arthur Stratton, F.R.I.B.A. 63 plates. Tiranti, for London University.

UNE MAISON—UN PALAIS

The entry of M. Le Corbusier into the architectural lists was one of the more startling events of recent times. His writings are already well known in all civilized countries, having been translated into many languages, and their author's freshness of outlook, together with his flair for journalism, have no doubt been responsible for this universal recognition of a new and interesting prophet. When rendered into English the staccato periods and rather sensational presentation are less fortunate than in the original French, but one trusts that Mr. Etchells will continue his work of translation for it is valuable to persons, like the present writer, who find the reading of a book in French a task of some magnitude.

Le Corbusier has not always received fair play from either the critics who deride him or from those who most admire him, for he is frequently held up to ridicule on grounds of pure æsthetics, when he had meant to tread only the narrow path of structural or economic rectitude. Although he has usually emerged from the conflict both unwounded and unbowed it is perhaps a little fortunate that he has not been recognized as a sincere advocate of unsentimental approach to those problems which, although not in themselves architectural, are integral parts of the *raison d'etre* of architectural existence.

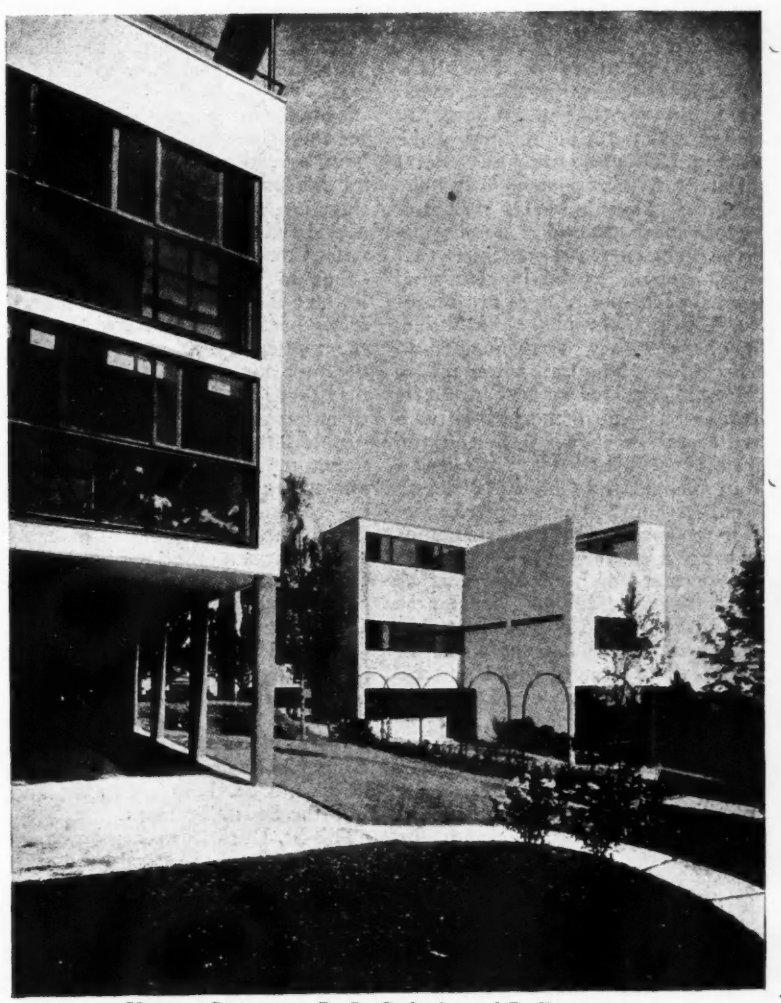
Le Corbusier has brought home some important facts which now seem mere truisms, but truisms, nevertheless, to which architects have long lent a deaf ear, namely, that the problems of today are not those of yesterday, and that because building science progresses so rapidly it is only by anticipating the future that we can hope to cope with its problems as they arise.

Sunlight, fresh air, ventilation, and economy are gradually receiving the respect they deserve from architects, but it must not be forgotten that Le Corbusier was one of the earliest effective advocates of them all. In *Vers une Architecture* and *Urbanisme* he made clear very forcibly his views on the house as a machine, and the city as a machine, and, although it is not easy at first to reconcile oneself to a countryside dotted with his box-like structures, or an industrial area whose inhabitants have sacrificed variety and independence to light, air, and economy, yet both his boxes and his towers are not now far removed from familiarity.

In applying himself to the problems of the working-class dwelling and the small villa, Le Corbusier has produced a host of ingenious details of construction in order to make possible the erection of simple houses which involve but little skill in building. Some of his French *confrères* have little faith in his wafer-like walls, and have prophesied that they must soon fail; but although some early examples were unsatisfactory, his structures would have appeared to have vindicated themselves.

The French are much more tolerant than we of new ways and means, and in England, owing to our ludicrous building laws, it is not possible to put up thin walls even if one is able to prove that they are stronger and better non-conductors than the law's minimum.

On the Continent the housing shortage problem is able to solve itself more easily because it is possible to practise economies when they are demonstrably sound.



House at Stuttgart. By Le Corbusier and P. Jeanneret.
[*From* Une Maison—Un Palais.]

Germany has taken more kindly to Le Corbusier than any other country, with the possible exception of the Soviet, and not even the most captious critic could fail to admire the thoughtful and ingenious detail which appeared in the little sketches in *Zwei Wohnhauser*. Those vast rolling windows alone are something to fill one with awe, and one wonders if the temporary elimination of the conventionally trained architect would not produce better mechanical detail. This would in time be made to please the eye, for even the engineer would strive to make his machines "look right." It is a foregone conclusion that glass admitting the ultra-violet rays must inevitably become the order of the day, and it is equally obvious that to continue to employ sash bars and mullions in their present profusion is a contradiction of purposes. That manufacturing firms do not at present produce rational windows is entirely due to the fact that they realize that until architects can be stirred out of their apathetic amours with the buildings of the past they cannot market better wares.

Le Corbusier's latest work, *Une Maison Un Palais*, as yet untranslated, deals with his now well-known house at Garches, and the little business of the League of Nations building at Geneva. Both are entertaining enough, but the book suffers from the defect of its predecessors in that among the illustrations are shown many machines that are obsolete and have no longer a vital message, while the bridges are reproduced by photographs so indistinct that whatever they were intended to convey is lost. The transporter bridge at Marseilles, whose spidery loveliness remains as a vivid memory to all who have seen it, is shown from the one point of view where it appears as an affront to both the Chateau d'If and the old harbour. This is unfortunate, but it weakens rather than condemns the work as a whole.

The house at Garches is interesting as the largest single building (so far as one knows) that Le Corbusier has undertaken. The villa extends a bleak welcome, slightly tinged with iodoform, while the far from modern furniture with which it is filled is as little reassuring as the *Punches* of a dentist's waiting-room. We are apt to forget, however, to what depths the smaller domestic work of France has sunk, so that even by unfair comparison the house does not suffer greatly. The enormous porch has about it that kind of logic which is particularly out of place on a building judged by old standards, and its mechanical sauciness is a characteristic trait of the kind which some critics find so irritating in Le Corbusier's work.

The palace for the League of Nations is quite another pair of shoes, and that so much brilliant thought brilliantly applied should have come to so little is almost tragic. Still, even over this Le Corbusier has managed to pull some chestnuts out of the fire, for the last few pages of the book are devoted to eulogies by some of the most famous *modern* architects of today. This is advertising on a scale which will make the blood of the old brigade in England run cold, but perhaps it is but another example of Le Corbusier's portentiousness. All architects in this country know to what extent the architectural societies are attempting to push their wares without losing their dignity. We are, perhaps, the last country in the world in which "big business" is not respected as much as mediocre art and moribund respectability.

HAROLD TOMLINSON

Une Maison—Un Palais. Collection de "l'Esprit Nouveau." Les Editions. G. Crès et Cie, 11 Rue de Sevres, Paris.

THE ABBEY SACRISTY

Dr. W. Foxley Norris, the Dean of Westminster, in a letter to *The Times*, says :—

I have now communicated with all the members of my Chapter, and they have agreed to hold up the sacristy scheme for three months. The position, therefore, now is that Mr. Tapper has considered the suggestions of the Fine Arts Commission and altered his plan so as to incorporate them—i.e. has lowered the building somewhat and has set it back a little farther, and there the matter rests. Now, therefore, is the time for those who are convinced that there are better schemes to bring them forward.

In a letter in *The Times* over the signature "Custos" puts forward as an alternative to the scheme of the Dean and Chapter what is known to those who are familiar with the question as the St. Dunstan's Chapel site. This is the site now occupied by the Westminster School Gymnasium to the south-west of the Chapter House, and immediately east of the Chapel of the Pyx. There is, at present, no way of access from this site direct to the Church, and the only way would be across the Chapter House lobby to the little door which leads into St. Faith's Chapel, and so into the South Transept.

This St. Dunstan's scheme was one of the very first we considered. It is obvious to the superficial observer; was one of the first schemes put forward; and has been put forward a great many times since. But I am sorry to say that the following facts have, in our opinion, put it out of the question :—

1 : In the first place, the site is not our property, but the property of Westminster school. To this the promoters of the scheme have replied that that is a mere question of compensating the school by purchasing the site and providing another gymnasium. We, of course, consulted the Headmaster, who, very naturally, is resolutely opposed to it, as I am quite sure the Governors would be, and as a fact there is no available alternative place for the school purposes. We explored this with care. "Custos" airily speaks of property owned by the Chapter in Great College Street, "now serving for garages." But to offer a great public school a small coach-house in Great College Street as a suitable place for its gymnasium is hardly treating the question seriously. However, this does not really matter. The school is not willing to part with it.

2 : But let us assume that we could get possession : then comes the question of utilizing the Chapter House lobby as a thoroughfare—to be used, every day at all sorts of hours, for the purpose of carrying large things to and fro; and on the occasions (which are constant) of public services and ceremonies for large numbers of persons to go backwards and forwards. Now, has "Custos" ever watched the use of the Chapter House lobby? It is one of the very busy parts of the Abbey. Multitudes of people use it day by day. What would the custodians of the Chapter House say to it? It would dislocate their arrangements quite hopelessly, render the Chapter House inaccessible very often, and could only cause endless and indefensible friction between two authorities which, so far as I know, have worked amicably side by side for centuries.

3 : But let us suppose that even all this is satisfactorily arranged, then comes the insurmountable objection—the cutting into St. Faith's Chapel, and turning that chapel into a busy thoroughfare. Here the Dean and Chapter must, I fear, make a definite stand. As I have said again and again, St. Faith's Chapel is the one quiet spot in the Abbey always available—continuously used—for private prayer and quiet thought by people from all parts of the world. Probably very few people, except the Dean, know to what extent this privilege is valued and this chapel loved. To destroy all this and turn that beautiful, sacred place into a passage-way for all the paraphernalia of our ceremonies and services is quite unthinkable. The mere fact that it should have been proposed is one of the many evidences of how little our critics really know of the Abbey and its life on the devotional side.

That has been our difficulty throughout this controversy. It is easy for those who only know the Abbey as an

archæological treasure-house or as one of the show places of London, or who come to its doors for an occasional ceremony or service, to suggest this or that as an easy solution of our problem. But to those who are daily in and out of the Abbey, who use it regularly and know what goes on, the complexity of the problem is apparent.

May I, having said so much, suggest to my friends the members of the newly formed "Council for the Protection of Westminster Abbey" that they shall consider the advisability of altering their very provocative title? For a body with such a name to approach the real custodians sets up at once an atmosphere in which the friendly attitude—which, I am persuaded, is the only useful attitude—becomes very difficult. I can assure them that if they knew they would allow that we do more every year to "protect" the Abbey than any outside body can hope to do in a lifetime. Many dangers surround it.

"Custos," replying to the Dean in a subsequent issue of *The Times*, says: The plan, admittedly not of my invention, which I put forward lately in your columns, has been traversed by the Dean of Westminster with equal cogency and courtesy. He does me justice in assuming that my plea for a reconsideration of the gymnasium (or St. Dunstan's Chapel) site was offered seriously and sympathetically, but less than justice in representing it as a proposal to recompense a great public school for the loss of its gymnasium with the amenities of a small coach-house. What the school might be asked to accept is not, of course, the coach-house, but a site of fair extent—unless the plans and my information err—and, possibly, substantial help in the erection of a new building upon it.

The Dean has followed out in some detail the inconveniences consequential to the establishment of a sacristy where the gymnasium now stands. They turn partly on the devotional uses of St. Faith's Chapel and partly on the crossing of the Chapter House lobby. But if the existing entrance into the gymnasium, near the Little Cloister, were alone used, there would still be, at the cost of a few additional yards in the journey, a covered way into the Abbey from the sacristy. The major need—the need of accommodation—would have been handsomely met, while worshippers in St. Faith's Chapel and visitors to the Chapter House would have none of their present privileges disturbed.

The imperfections of the St. Dunstan's Chapel site have been catalogued, not without fitting emphasis, in the Dean's letter. But they are all relative to the imperfections of every other scheme yet advanced for the provision of a sacristy at the Abbey and deserve to be weighed accordingly. No one has contended that the gymnasium itself would not make an excellent sacristy when reconstructed—roomy and well within the precinct. If that be so, its virtue as an alternative cannot be "superficial." It is unique among the alternatives in this, that the difficulties preventing its adoption are not in the site itself. At worst they are secondary, and, when put to all the tests of perseverance, ingenuity, and good will, it is their stubbornness which might prove superficial after all.

LAW REPORT

CLAIM FOR A NEW LEASE: VALIDITY OF NOTICE

D. R. Evans, Ltd., v. *Coleman. King's Bench Division. Before Mr. Justice Talbot*

Plaintiffs, D. R. Evans, Ltd., of Farringdon Road, E.C., applied for a new lease, as from December 1919, for premises at Borough High Street, S.E., under section 5 of the Landlord and Tenant Act, 1927, and the point in the case was as to the validity of the notice for the new lease.

Plaintiff's case was that in January, 1928, they applied to defendant's solicitors for a renewal of the lease of their premises, which expired in December 1929. They said this was a valid notice under the Act.

Defendant denied the validity of the notice, and said it was not in the prescribed form, and, further, that plaintiffs had not shown their title to the premises.

His lordship said, in his opinion, the defendant was right on the point of the validity of the notice. There was no particular form of notice prescribed under the Act, but this letter to the defendant's solicitors, which the plaintiffs claimed to be a notice, was an ordinary letter which any tenant might write to his landlord. The plaintiffs' case failed on this point. When the case was before the county court, the defendant, in March, raised the point that the name and situation of the premises, under which the new tenancy was claimed, had not been disclosed under the county court rules, but on that point he decided in plaintiffs' favour. The third point raised was that the plaintiffs did not disclose their title, and here again he found in favour of the defendant.

Judgment was entered for the defendant, with costs.

RETIREMENT OF SIR G. FOSTER

A farewell dinner to Sir Gregory Foster, who retires from his position of Provost of University College, London, on December 31, will be given by past and present students of the college on Friday, December 20. Applications for tickets should be made to Mr. B. N. Parker, Hon. Sec., Old Students' Association, University College, London.

SOCIETIES AND SCHOOLS

WESTMINSTER TECHNICAL INSTITUTE

Proximity to the professional offices in and around Victoria Street, London, rendered it inevitable that to the L.C.C. Westminster Technical Institute should be assigned the duty of providing technical and professional training in civil engineering, structural engineering and architecture. Considerable care has been devoted, in this department of the Institute's activities, to the development of evening courses of instruction adjusted to the requirements of the professional worker, and it is now possible for both senior and junior students to undertake, with the guidance of highly qualified and experienced teachers, systematic and progressive courses of study extending over a period of years.

Group-courses of instruction in architecture, construction, surveying and valuations, have been arranged to provide students engaged in the offices of architects, building and quantity surveyors or builders, and in the building trades with a systematic course of study extending over several years, and involving attendance for several evenings a week. These group-courses amply cover the requirements of the R.I.B.A., the Surveyors' Institute, the Institute of Builders, the Institution of Municipal and County Engineers, and the Auctioneers' and Estate Agents' Institute.

The principal of the Institute is Mr. J. Stuart-Ker, B.SC., A.M.INST.C.E. The architectural staff includes Major F. C. Webster, O.B.E., A.R.I.B.A., F.S.I., and Mr. W. J. Wilsdon, L.R.I.B.A. Prospectus of the session 1929-30, which begins on September 23, can be obtained from the principal.

NORTHERN POLYTECHNIC SCHOOL OF ARCHITECTURE

The Northern Polytechnic School of Architecture is officially recognized by the R.I.B.A., and students who complete satisfactorily the full three years' course of study in the school, and pass in the school examinations, are exempted from the intermediate examination of the R.I.B.A.

The teaching staff consists of qualified practising architects, assisted by specialists in building science, acoustics, structural engineering, heating, ventilating, and other subjects relating to architectural practice. The department with which the school is associated also provides training for all branches of the building industry, and architectural students are thereby offered excellent

opportunities of studying in the workshops and laboratories the many practical processes which they will ultimately be required to supervise.

The curriculum is arranged to provide the fullest possible training, and every aspect of architectural practice is dealt with by means of lectures, demonstrations, visits to buildings in course of erection, and studio work. The Head of the Department of Architecture is Mr. T. E. Scott, F.R.I.B.A. Copies of the prospectus for session 1929–30 can be obtained from him at the Northern Polytechnic, Holloway Road, N.7.

BRIXTON SCHOOL OF BUILDING

The evening departments of the L.C.C. School of Building, Brixton, which commences on September 23, provides organized courses of training and individual classes for the purpose of instruction in the work of the building industry and of allied vocations and professions.

Although the courses of study and the scope of the instruction have been arranged primarily with a view to fitting the student for the practical duties of the various branches of the building industry, special consideration is given to the requirements of the recognized examinations held by independent bodies. Amongst these examining bodies the following receive special attention: The Institute of Builders, the R.I.B.A., the Surveyors' Institution, the Institution of Structural Engineers, and the Institution of Sanitary Engineers.

The classes of the architecture department are planned to meet all the requirements of the student of architecture as regards design, history of architecture and building, and drawing. The scheme of instruction is so arranged that an architectural course includes certain building subjects which are necessary to an architect's training. A close co-ordination of the instruction in architecture and building construction is designed to ensure that the student shall obtain an intelligent grasp of the interdependence of the structural and æsthetic elements of his work. Mr. F. E. Drury, M.SC.TECH., M.I.STRUCT.E., F.I.SAN.E., is the head of the school, and the prospectus for the session 1929–30 can be obtained from him on application.

DEVON AND CORNWALL ARCHITECTURAL SOCIETY

The annual outing of the above Society took place recently, when a visit was made to Barnstaple, Bideford, and Torrington. The members of the party were met at Barnstaple by Mr. Bruce Oliver, A.R.I.B.A., of that town, who subsequently conducted the members to the parish church and St. Anne's Chapel—the old school of the poet Gay: the Penrose Almshouses, and explained the widening of Barnstaple and Bideford bridges.

Other interesting work inspected included old plaster ceilings of which the West Country abounds in many good examples. After leaving Bideford the party visited the remains of the old priory at Frithelstock, where Mr. Oliver is at present engaged in the work of preservation.

Lunch was taken at Barnstaple, after which a presentation was made by the members of the Society to Mr. B. Priestley Shires, its present representative on the Council of the R.I.B.A. and one of the oldest members of the Devon and Cornwall Architectural Society.

SOUTH WALES INSTITUTE OF ARCHITECTS

A luncheon in honour of Mr. J. B. Wride, A.R.I.B.A., Rome Scholar in Architecture 1929, was given at Cardiff recently by the above Institute.

The chair was taken by Mr. T. Alwyn Lloyd, F.R.I.B.A., president of the Institute, and the guests included Mr. J. B. Wride (senior) and Mrs. Wride, Councillor W. G. Howell, Principal Charles Coles, B.SC., Dr. Cyril Fox, F.S.A., Mr. W. S. Purchon and Mrs. Purchon, Mrs. Alwyn Lloyd, Mr. and Mrs. Percy Thomas, Mr. and Mrs. C. S. Thomas, Mr. J. Herbert Jones, Mr. W. Rosser, Mr. C. F. Ward, Mr. and Mrs. H. Teather, Mr. R. H. Winder, and Mr. T. Edgar Smith.

Councillor W. G. Howell proposed Mr. Wride's health and expressed, on behalf of the Corporation and the citizens of Cardiff, good wishes on his achievement.

After the chairman's introduction, in which he expressed the pleasure of the Institute at being able to show in this way their pride in Mr. Wride, Councillor Howell's proposal was seconded by Principal Coles, who referred to the work which was being done at the School of Architecture. But for this, he said, it would have been impossible for Mr. Wride, a student whose whole training was obtained at this school, to have brought the Rome Prize to Wales for the first time.

Dr. Cyril Fox (Director, Welsh National Museum), then proposed the toast of the Welsh School of Architecture coupled with the name of its head. As a layman he felt it was a special privilege to do this, and he emphasized the enormous importance of architecture in civic life and in the lives of individual citizens. In his opinion one of the chief functions of the school was to inculcate students with the principles of classical and formal architecture, so that they could in some degree counteract the bad influence of the industrialized nineteenth century.

READERS' QUERIES

THE AREA OF BALLROOMS

F. H. writes: I have been commissioned to design a ballroom to accommodate a certain number of dancers. How is the dancing area computed for each couple?

[The area for ballrooms is best computed at 10 to 12 ft. per couple; 12 ft. gives very comfortable space; below 10 ft. there is inclined to be congestion in parts of the floor; 8 ft. is the minimum.

E. L. B.]

RAIN AND BRICK MULLIONS

R. H. writes: I am much interested in Mr. Nathaniel Lloyd's book on *Building Craftsmanship* reviewed recently in your journal, especially that part relating to the treatment and building in brick.

But I should like to be told one thing. In the modern 11 in. hollow wall wet goes through the outer leaf like paper, and I am anxious to know how the author keeps it out of his brick mullions to windows with lead lights, etc.

I built a large brick house some years ago, with an admirable brick—with mullions—with most disastrous results, as in storms on the south-west sides wet drove clean through the mullions and poured down on the cills inside. No question of its getting through the top or anything of that sort—it just drove through the brick mullions, which for days after kept saturated.

I tried everything I could find on the market and from experts, but without results. I should like to know his experience?

[I delayed replying to your reader's letter that I might make inquiry as to my client's experience of the brick windows illustrated in *Building Craftsmanship*. The house stands high and very exposed on the south and south-west. When torrential rain is driven by high wind against the windows, water enters through the casements and lead lights. The former fit very well, but, in such conditions, water will enter where air does; and no casement is airtight. The leakage through lead lights is caused by faulty glazing, from which none is entirely free. The rain runs down the squares of glass into the cames and the pressure of wind forces it round the glass and inside, whence it runs down on to the cills. No water has been forced through the mullions or other brickwork, and these have never been noticed to be wet; so, apparently, any moisture they may convey inside is evaporated. The bricks are of good texture but are hard and not very absorbent. Your reader's experience suggests that his bricks were exceptionally porous. When one comes to think

of it, there is no reason why brick should behave worse than stone does; indeed, one would expect to be able to get brick less porous than many sandstones.

NATHANIEL LLOYD]

TRADE NOTES

The exhibit of the Powell Duffryn Steam Coal Co. at the International Foundry Exhibition at the Royal Agricultural Hall, London, consisted chiefly of woodwork treated with the new decorative wood preservative—Presotim. This preservative is claimed to have many advantages : to be cheap; to require no skill in application; to bring out the grain of the wood; and to preserve wood against insects, dry rot, and other " enemies."

The stand (No. 16, Row G) of the Telephone Manufacturing Co., Ltd., at the Shipping, Engineering and Machinery Exhibition, is devoted to a display of telephone apparatus suitable for use aboard ship—in aircraft—factories, and offices. The most interesting piece of apparatus shown is the " Laryngaphone " noise-excluding telephone, by means of which, it is claimed, speech can be transmitted and received clearly and without distortion in the noisiest surroundings. To enable visitors to test the claims made for this instrument, a cabinet has been erected on the stand within which provision is made for creating a large volume of noise, rendering it impossible for an ordinary telephone to be used. By means of " Laryngaphones," however, it is claimed that a conversation can be carried on with ease, despite the din. In addition to the special classes of telephone, the exhibit includes a comprehensive assortment of apparatus of standard design.

The stand of Monel-Weir at the Shipping, Engineering and Machinery Exhibition is extremely interesting. Polished Monel metal sheet has been used for the walls of the office, and is lit by concealed flood lamps. The doors are of hand-beaten Monel metal sheet, and are worthy of the special attention of those visitors whose interests in this alloy are not entirely confined to its use in solving the problems associated with high-pressure high superheat steam. The Monel metal fittings of a ship's cabin are also shown, and are claimed to dispel the fear of rust development and discoloration. Other exhibits include a bedstead, bedside cabinet, electric fan, electric hot-water radiator, heating radiator, hot-water jug, table-lamp, mirror, towel-rail, storm-rail bracket, glass and bottle holders, shelves, sponge and soap rack, patent ventilator, and door furnishings. Gallery equipment includes pure nickel cooking utensils. Monel metal tailshafts, which have now become standard equipment on so many well-known speed-craft, as well as propellers, cleats and bollards, turbine blade sections, condenser tubes, valves and valve seats, and numerous other items are all collected and displayed on stand No. 8, Row H.

THE BUILDINGS ILLUSTRATED

Following are the specialists, general contractors, and some of the sub-contractors for the buildings illustrated in this issue :

Middlesex Hospital (pages 410-15). Consulting constructional engineer, Dr. Oscar Faber, O.B.E.; consulting heating engineer, Mr. T. J. R. Kiernan, who supervised the heating, hot water, steam work, etc. General contractors for the west wing, Holland & Hannen and Cubitts, Ltd. Sub-contractors : Patent Impervious Stone and Construction Co., Ltd., re-constructed stone; the Dorking Brick Co., facing bricks; David Colville and Sons, Ltd., steelwork; G. N. Haden and Sons, Ltd., heating, hot water, steam, etc.; Dent and Hellyer, Ltd., plumbing, drainage and sanitary fittings; Read and Partners, Ltd., electric light, power, etc.; Aldous and Campbell, Ltd., lifts; Diespeker & Co., Ltd., terrazzo floors and main staircase; Stuart's Granolithic Co., basement corridor floor and subsidiary stairs; Carter & Co., Ltd., tile wall decoration; Jules Lang (Nitaline), Ltd., operating theatre walls; Henry Hope, Ltd., staircase and operating theatre metal windows; Gladwell and Kell, Ltd., railings and children's balcony; J. P. White and Sons, Ltd., flush doors; James Gibbons, Ltd., door and window furniture; A. Jones, Lock & Co., locks; Stirling and Johnson, slates; Chater, Ltd., glass.

House at Woodley, Berkshire (pages 438-9). General contractors, Paddick & Co. Sub-contractors : Bratt Colbran & Co., and Waring and Gillow, Ltd., fireplaces; J. T. Spencer and Sons, Ltd. (Reading), central heating and hot water supply ; Shanks & Co., Ltd., and Messrs. Waring and Gillow, Ltd., sanitary fittings; Mr. F. C. Barnard, electric light installation; J. A. Girdler, steel casements.

Messrs. Galsworthy, Ltd., were responsible for the outside lamps, bronze lettering, and the whole of the interior fittings at the " Bull and Butcher " public-house illustrated in our issue for September 11.

COMPETITION CALENDAR

November 8. The Somerset Rural Community Council, in conjunction with the R.I.B.A., invite architects and architectural assistants resident in Somerset to submit designs for Country Garages and Petrol Filling Stations. Assessor: Mr. Harold E. Todd, A.R.I.B.A. Prizes: The " Sir Charles Wakefield " prize, £10 10s. and silver cup presented by the Somerset Automobile Association. Further prizes of £7 7s., £5 5s. and £3 3s. and two cups presented by the S.A.A. Particulars from the Secretary, Somerset Rural Community Council, 42 Bridge Street, Taunton. Deposit 10s. 6d.

November 30. The Hull Corporation invite architects to submit schemes in competition for the facades of the New Street from Paragon Station to Beverley Road, Hull, and openings to adjoining streets. Assessor: Sir Reginald Blomfield, R.A., P.P.R.I.B.A. Premiums: £750, £350 and £150. Applications for conditions of the competition, etc., should be made to J. R. Howard Roberts, Town Clerk, Guildhall, Hull. Deposit £1 1s. Latest date for sending in designs: November 30.

December 7. The Provost, Magistrates, and Councillors of Dumfries invite architects practising in Great Britain to submit competitive designs for the Town Hall and Municipal Offices, which it is proposed to erect on the site of the old Town Hall and of the Municipal Offices, Dumfries. Assessor : Sir George Washington Browne, P.R.S.A. Premiums: £300, £200, and £100. Application for conditions of competition, etc., should be made to R. A. Grierson, Town Clerk, Town Hall, Dumfries. Deposit £2 2s. Latest date for sending in designs: December 7.

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

26486. Ames, R. Y., and Finnis, W. T. Roofing tiles. August 30.

26516. Hardy, F. Roofing tiles. August 31.

25980. Herbert, F. E. Wall ventilator. August 27.

26346. Bohler & Co., Akt.-Ges. Geb. Walls of buildings. August 29.

26382. Bull, F. D. Manufacture of synthetic marble, etc. August 30.

SPECIFICATIONS PUBLISHED

298971. Diel, J. Doors and the like.

317949. Hopkins, C. Y., and Cartland & Son, Ltd., J. Window and door hinges and pivots.

318011. Peters & Co., Ltd., G. D., and Chattaway, H. A. Sliding windows.

318057. Smith, W. F. B. Devices for preventing draughts around doors, windows, and the like.

ABSTRACT PUBLISHED

315255. Elliott, C. A., and Elliott & Sons (Reading), Ltd., S., Gosbrook Road, Caversham, Reading. Panelled work.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The HOLBORN B.C. is to make alterations at the baths to enable use in winter for dancing, etc., at a cost of £2,200.

The L.C.C. has prepared a scheme for the construction of an additional lecture hall, to accommodate 150 at the Geffyre Museum in Kingsland Road, SHOREDITCH.

EASTERN COUNTIES

The ESSEX C.C. has prepared schemes for the widening and improvement of various county bridges at a total estimated cost of £61,000.

SOUTHERN COUNTIES

Messrs. Fraser and White, Ltd., are to extend their premises at the Camber Docks, PORTSMOUTH.

The DARTFORD U.D.C. is acquiring 37 acres of land near Lowfield Street for another housing scheme.

The Tramways Committee of the Portsmouth Corporation is to erect a tram depot, bus garage, and workshops at EASTNEY.

Extensions are to take place at the school in Inglis Road for the Building Committee of the Bethel Mission Hall, PORTSMOUTH.

The Kent Education Committee has acquired a site for new buildings for the Simon Langton School for Girls at CANTERBURY.

The Kent Education Committee has obtained a site for the erection of an infants' and juniors' school at SOUTH ASHFORD.

The Kent Education Committee has acquired a site at CRAYFORD for the erection of an infants' and juniors' school.

The Kent Education Committee is acquiring sites at SITTINGBOURNE for the erection of two central schools.

The Kent Education Committee is acquiring a site at WEST WICKHAM for the erection of a central school.

The Kent Education Committee has purchased a site at CUDHAM for the erection of a central school.

Plans passed by the DARTFORD U.D.C.: House, Shepherds Lane, for Miss E. A. R. Hurford; bungalow, Watling Street, for Mr. A. Underhay; alterations, show rooms and offices, Spital Street, for Messrs. J. C. Beadle, Ltd.; bungalow, Swaisland Road, for Mr. A. Anstey; house, Highfield Road, for Mr. J. Munro; four houses, Dover Road, for Mr. W. F. Summers; two bungalows, Wilmot Road, for Mr. W. J. Brise; filter press house and store, Victoria Wharf, for the Zinc Manufacturing Co., Ltd.; alterations and additions, West Hill, for the Dartford Board of Guardians; bungalow, Dover Road, for Mr. W. Mitchell.

Plans passed by the PORTSMOUTH Corporation: Extensions, 89 London Road, for Messrs. Dye Bros.; alterations, "Travellers' Joy" public-house, Milton Road, for Messrs. Geo. Peters, Ltd.; thirty-six houses, Chatsworth Avenue, Cosham, for Mr. G. Mitchell; six houses, Compton Road, for Mr. A. Le Santo; twenty-four houses, Northwood Road, for Mr. C. Merritt; seventeen houses, Amberley Road, for Messrs. Morgan and Gates; fifteen houses, Sunningdale Road, for Messrs. G. Mouncher and Sons; alterations, "Swan" public-house, Copnor Road, for Messrs Geo. Peters, Ltd.; alterations, "Eagle" public-house, Fawcett Road, for Messrs. G. Peters, Ltd.; six houses, Brecon Avenue, Cosham, for Mr. H. R. Horsey; eight houses, Grunieson Road, for Mr. G. A. Day; eight houses, Southampton Road, Cosham, for Mr. E. W. Payne; business premises, Green Lane, Hilsea, for Mr. S. Brittan; show room, Granada Road, for Haig Motor Co., Ltd.; six houses, Merrivale Road, for Mr. H. Dye; business premises, 206–8 Fratton Road, for Mr. D. Gammans; five houses, Havant Road, for Messrs. McCormick and Sons; alterations, "Rose in June" public-house, Milton Road, for H. G. Hellyer and Son, Ltd.; six houses, Hewett Road, for Mr. J. Wedge; four houses, Spur Road, for Mr. M. Jones; twelve houses, Compton Road, for Mr. W. A. Roberts; bakery depot, High Street, for Portsea Island Co-operative Society, Ltd.; twelve houses, Merryvale Road, for Mr. W. Thorpe; two shops, Copnor Road, for Mr. E. Payne.

SOUTH-WESTERN COUNTIES

Mr. H. Maddern has prepared plans for extensions at the Cliff Hotel, PENZANCE.

The PENZANCE Corporation has adopted a revised layout for the new housing scheme.

The trustees of the Mill Street Mission, DORCHESTER, are to rebuild their premises.

The PENZANCE Corporation is considering a scheme for the construction of a sailing pool.

The BRISTOL Corporation is to erect fifty-two houses at the Horfield housing estate at a cost of £19,880.

The DORCHESTER Corporation has acquired land in Poundbury Road for the extension of the highways depot.

The BRISTOL Corporation is to ask the Improvement Committee to prepare a plan and estimate of the cost of covering over a further section of the River Frome above Wade Street bridge.

Plans passed by HAMPTON U.D.C.: 4 houses, Ormond Avenue, for Mr. J. Curtis; 5 shops and houses, High Street, for Mr. W. Alexander; bungalow, Buckingham Road, for Mr. W. J. Byatt; house, Queens Road, for Mr. W. Ellis; house, Percy Road, for Mr. J. P. A. Rowe.

Plans passed by SEDGLEY U.D.C.: Salvation Army Hut, Ettymore Road, for Salvation Army; house, Turls Road, for Mr. H. Cole; house and surgery, Vale Street, for Mr. McMillman; offices Deepdale Lane, for Messrs. Alfred Allen and Son, Ltd.; bungalow, Goldthorn estate, for Mr. Norman Price.

At a meeting of the DARTMOUTH Town Council Mr. F. Scardifield proposed that a scheme be prepared for the erection of fifty houses under the Housing Act, 1924. He said they were coming to the end of the present scheme at Townstal. Applications were being received which proved conclusively there was room for fifty more houses in the borough. Mr. J. H. Smith seconded, and said he should not be satisfied until they had the number of houses which the medical officer of health said was necessary. Alderman Richards objected to being tied down to the Wheatley Act of 1924. If the mover would delete that, he would support the motion. Mr. W. E. Roberts objected to being tied by the resolution, and proposed, as an amendment, that they consider further sites and houses in the borough. This was seconded and carried.

MIDLAND COUNTIES

The LUTON Education Committee is to erect a handicraft centre at Beech Hill School.



House at Woodley, Berkshire. Designed by Willcocks and Greenaway. The walls are faced with hand-made deep red multi-coloured bricks. The roof is covered with sand-faced tiles. All the windows are fitted with steel casements glazed with leaded lights. Plans of the building are reproduced on page 439.

The DUDLEY Corporation proposes to reconstruct the New Town Bridge at Cradley Road at a cost of £2,600.

The DUDLEY Corporation is to submit to the Ministry of Health plans for the erection of small-type houses.

The DUDLEY Education Committee has selected a site on the Priory estate for the erection of an elementary school.

The DUDLEY Corporation is considering the acquisition of land at Netherton and Mushwell Green, where it would be possible to erect 450 houses.

Plans passed by the DUDLEY Corporation: Licensed premises, Prospect Row, for Wolverhampton and Dudley Breweries; alterations, 15 Halesowen Road, for Messrs. Geo. J. Mason, Ltd.; bank, Union Street, for Barclays Bank, Ltd.; two houses, Holly Hal., for Messrs. Clarke and Morris.

NORTHERN COUNTIES

Mr. W. H. Moss is to develop an estate in Weston Lane, OTLEY.

The CARLISLE Corporation is to erect a further 250 houses on various housing estates.

The SOUTH SHIELDS Corporation is to proceed with the conversion of 7,400 privies at a cost of £53,000.

Messrs. Henderson Bros. are to erect twenty houses on an estate at Harton Lane, SOUTH SHIELDS.

The CARLISLE Corporation has decided to erect conveniences in Court Square at an estimated cost of £3,000.

The SOUTH SHIELDS Corporation is considering the acquisition of 19 acres of land near Tyne Dock for a housing scheme.

Messrs. Page and Son, architects, are to carry out alterations at the Marine Hotel, Seafield Terrace, SOUTH SHIELDS.

Messrs. Davidson, Son and Sherwood, architects, are to erect shops and flats in South Avenue, Harton, SOUTH SHIELDS.

The BRADFORD Corporation is to erect buildings for chlorination plant at Chellow Heights filtration works at a cost of £500.

The OTLEY U.D.C. has agreed to the layout of the Westbourne estate and decided to obtain tenders for the erection of 100 houses.

The BARNSLEY Corporation is considering a layout plan prepared by the borough engineer for the New Street improvement scheme.

Plans passed by the OTLEY U.D.C.: Additions to cottages, Ellar Gill, for Mr. G. W. Butler; garage, Railway Sidings, for Shell-Mex, Ltd.

The BILLINGHAM U.D.C. is in negotiation with the DURHAM County Council regarding the provision of a maternity hospital for the district.

The corporations of Sunderland, South Shields and West Hartlepool are combining in a scheme for the extension of the SUNDERLAND Mental Hospital.

The BRADFORD Corporation Licensing Committee has approved plans for alterations at the Theatre Royal, the Regent Picture Theatre, and the St. George's Hall.

The BRADFORD Corporation Markets Committee is to demolish premises in Rawson Road in connection with the scheme for the development of the John Street market.

Plans passed by the STALYBRIDGE Corporation: Bakehouse, Ridgehill Lane, for Mr. T. Earnshaw; extension to foundry, Phœnix Works, for Messrs. R. Broadbent and Sons, Ltd.

The BRADFORD Corporation is to promote a Bill to enable lands and buildings in Westgate, John Street, and Rawson Road, to be compulsorily acquired for market extensions.

In association with Mr. Percy Dalton, the city engineer, a scheme has been prepared by Mr. E. L. Mansergh, consulting engineer, for improving the water supply of CARLISLE at a cost of £121,000.

The BRADFORD Corporation has prepared a scheme for the provision of a new bridge at Apperley Bridge and approaches thereto on each side of the river. The cost is estimated at £40,000.

Plans passed by the BARNSLEY Corporation: Shop, Pontefract Road, for Mr. A. Radford; shop and house, Honeywell Lane, for Mr. Fred Joynes; warehouse, Grahams Orchard, for Harrals Stores, Ltd.

The BRADFORD Corporation has acquired a site at Thorp Garth, Idle, for the erection of branch baths and obtained the approval of the Ministry of Health to the scheme for the erection of public washhouses in the Leeds Road district.

The FORMBY Urban Council have instructed the surveyor to prepare plans and specifications for as many houses as can be erected on the New Road site, up to twenty-two, at a figure which will enable the Council to let the houses at a rent not exceeding 12s. per week.

At a meeting of the BARNSLEY Corporation the borough engineer submitted the layout for the erection of 150 houses on the Burton Grange estate, and the Committee has been asked to consider whether the scheme should be undertaken by direct labour or put out to contract.

The CARLISLE Corporation has asked the Education Committee to report as soon as possible its proposals for the provision of a new technical school in conjunction with the proposed new central schools on a new site and to incorporate in the proposals its recommendations as to the school of art.

Plans have been approved and building operations will immediately start on a new Olympia which is to be built on a site in Cross Lane, SALFORD, which covers an area of 10½ acres. It will provide a theatre to seat 3,000 people, a restaurant to seat over 1,000 persons, and an amusement park.

Plans passed by the SOUTH SHIELDS Corporation: Extensions, "Lord Nelson" public-house, Woodbine Street, for Mr. F. W. Newby, architect; consulting room and dispensary, Hudson Street, for Mr. Leonard Hill, architect; alterations, "Willie Wouldhave" public-house, Ferry Street, for Messrs. J. H. Morton and Son.

Providing a sufficient grant can be obtained from the Ministry, the CARLISLE City Council proposes to extend its Castlecarroch water scheme at a cost of £62,600. It is proposed to instal filter plant for at least 1½ million gallons of water immediately, and to erect a filter house large enough to accommodate plant to deal with a further half-million gallons; also to lay a new 18-in. main from Cumwhinton reservoir into Carlisle.

The MANCHESTER Corporation Housing Committee reports that the need for using the land at Wythenshawe for housing purposes has become imperative, and the provision of the necessary services should be pressed for at once, so that full development of this land as a building estate may be begun without delay. The cost of carrying out a programme of 10,000 houses similar in type to those now being erected by the Committee will, among other causes, be dependent mainly upon the cost of building operations prevailing at the time each section of the work is begun, but, should these costs not fall below the present level, the total cost of the houses, including land, street works, and other incidental expenditure, would be about £5,000,000. Details of each section of the scheme before it is begun will form the subject of a separate report to the City Council.

Plans passed by the CARLISLE Corporation: Two houses, Upperby, and garage, Water Street, for Messrs. Benfield and Slack, architects; two houses, Skiddaw Road, for Mr. H. Hodgkinson, architect; layout of estate, Burgh Road; extensions, County Garage, Lowther Street, and shops and offices for Border Oil Co., in Duke's Road, for Mr. H. Foxall, architect; house, London Road, and four houses, Burgh Road, for Mr. H. E. Scarborough, architect; bungalow, Durran Hill Road, for Mr. J. H. Martindale, architect; alterations, premises of Messrs. Graham and Roberts in Botchergate, for Mr. Irving Graham, architect; employment exchange, Rockergate, for H.M. Office of Works; Salvation Army hall, St. Nicholas, for Mr. Oswald Archer, architect; bakery extensions, Watson Street, and shop in Warwick Road, for Mr. S. W. B. Jack, architect; extensions, Messrs. Barker and Co.'s premises in Castle Street, for Mr. S. Mann, architect.

SCOTLAND

The Clyde Structural Iron Co., Ltd., is to erect new buildings at its works at Scotstoun, GLASGOW.

Messrs. John Glen & Co., Ltd., are to erect a building at the corner of Hutcheson Street and Garth Street, GLASGOW.

Messrs. J. W. Laird and Napier, architects, are to erect additions to the premises of the Union Cold Storage Co. fronting Sydney Street, Armour Street, and Melbourne Street, GLASGOW.

MISCELLANEOUS

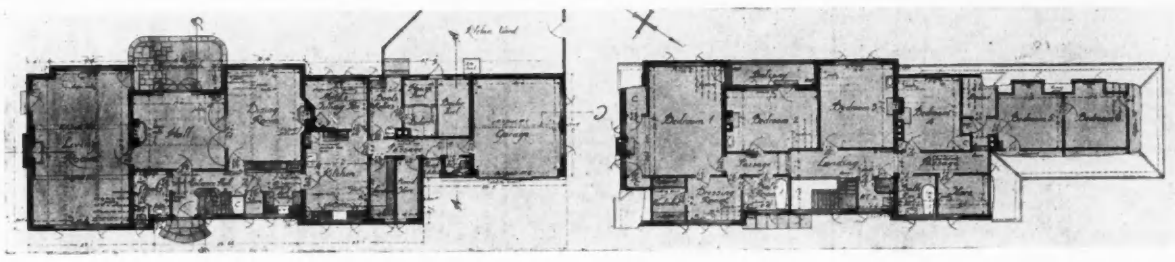
The DOUGLAS (I.O.M.) Corporation is making inquiries for land for further housing sites.

The DOUGLAS (I.O.M.) Corporation has passed plans for the erection of a Salvation Army Citadel in Hanover Street.

Messrs. Palace and Derby Castle, Ltd., has submitted to the DOUGLAS (I.O.M.) Corporation plans for the erection of a theatre, arcade, and cinema at The Crescent.

The DOUGLAS (I.O.M.) Corporation has approved the plans of the Corporation architect for the erection of shops and houses in connection with the Bigwell Street scheme.

Two thousand men are now working on the creation of the new International University City in SPAIN. The estimated cost of the scheme is about £10,600,000. The city will comprise 1,615 acres. Fifty thousand trees are to be planted, and all the avenues leading to the actua bu'ldings will be 132 t. wide.



House at Woodley, Berkshire. Designed by Willcocks and Greenaway. Ground- and first-floor plans. The floor of the living room is covered wi h oak parquet flooring. The internal woodwork in the majority of the rooms is stained brown; the walls below picture rail are finished with a rough buff surface and left undistempered. Central heating is installed throughout. Access to the garage is obtained through a corridor at the end of the house.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_2	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_1	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_1	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_2	Barnard Castle	N.E. Coast	1 6	1 1½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_2	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury ..	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster ..	Yorkshire	1 7½	1 2½
B	Dorchester ..	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich ..	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_1	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone. 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick. per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	0
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	0	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies	£13	0	0
Countess	25	0	0
Duchess	32	0	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	0	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6	7 0
Grey-green do.	5	9 0
Green peggies, 12 in. to 8 in. long	4	13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard			
Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	4
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	3
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	9
DO. framed in floors, roofs, etc., per ft. cube	0	5	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 9½d. *per hour;* MATE, *do.* 1s. 4d. *per hour;* ERECTOR, 1s. 9½d. *per hour;* FITTER, 1s. 9½d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1s. 9½d. *per hour;* MATE OR LABOURER, 1s. 4½d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 9½d. *per hour (plus allowances in London only);* LABOURER, 1s. 4d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¼ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 8d. *per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span 1s. 6d. to 2s. per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1s. 8d. *per hour;* LABOURER, 1s. 4d. *per hour;* FRENCH POLISHER, 1s. 9d. *per hour;* PAPERHANGER, 1s. 8d. *per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.

The measured work price is on the same basis . . . per ft. sup. £0 0 2½

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. from 3d. to	0	0	6
Plaster-board, per yd. sup. from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpoliahed, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	5½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, SEPTEMBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." 3 p.m. **3 p.m.**

THURSDAY, SEPTEMBER 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Seventeenth-century Furniture." 12 noon. "English Eighteenth-century Furniture." 3 p.m. "Jade and Lacquer." 7 p.m. **12 noon.**

FRIDAY, SEPTEMBER 27

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." 12 noon. "Chinese Sculpture." 3 p.m. **12 noon.**

SATURDAY, SEPTEMBER 28

Sunrise, 6.54. Sunset 6.54.

THE LONDON SOCIETY, Lancaster House, S.W.1. Visit to Guy's Hospital, St. Thomas's Street, S.E.1. Applications for tickets to the Secretary of the Society.

BRITISH MUSEUM, Bloomsbury, W.C.1. "Monuments of Assyria—II." 3 p.m. "Greek Sculpture—II." 3 p.m. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. 12 noon. "Ironwork." 3 p.m. **12 noon.**

MONDAY, SEPTEMBER 30

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. Opening of the autumn session of training courses for examinations for sanitary inspectors, smoke inspectors, associateship (general hygiene and sanitation), associateship (food, hygiene, and sanitary science). Particulars obtainable from the Secretary at the above address.

WELSH SCHOOL OF ARCHITECTURE, Technical College, Cardiff. Opening of Session.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. **12 ncon.**

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last day for entry for Surveyors' Institution Examinations

WEDNESDAY, OCTOBER 2

UNIVERSITY OF LONDON. L.C.C. Central School of Arts and Crafts, Southampton Row, W.C.1. Commencement of series of Wednesday lectures on "History of Architecture," by Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

THURSDAY, OCTOBER 3

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting, Letchworth. Members and their friends assemble at their hotels in Hitchin, Baldock, and Letchworth. Members will be notified by the Institute in due course of their allotted hotels.

FRIDAY, OCTOBER 4

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting. At Icknield Halls. Address by Sir Edgar Bonham Carter, K.C.M.G., C.I.E. "Garden Cities, Satellite Towns and Decentralization." 10 a.m. Lunch at Icknield Halls, 1 p.m. Motor coach tour round Letchworth, 2 p.m. Institute Dinner at Icknield Halls, 7.15 p.m. **10 a.m.**

SATURDAY, OCTOBER 5

Sunrise 7.6. Sunset, 6.30.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to London Telephone Exchanges—City, Central, and Trunk. Meet G.P.O. (South), Carter Lane, E.C.4, at 2.15 p.m. **2.15 p.m.**

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting. Motor coach tour to points of interest on the North Orbital Road. 9.30 a.m. Lunch at Welwyn Garden City. 1.30 p.m. Tour of Welwyn Garden City. 2.30 p.m. Dinner at Letchworth Hall Hotel. 7.30 p.m. **9.30 a.m.**

SUNDAY, OCTOBER 6

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting. Visit to Cambridge, to inspect Colleges, &c., under expert guidance. Lunch at University Arms Hotel.

MONDAY, OCTOBER 7

LONDON UNIVERSITY, Gower Street, W.C. Opening of session.

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. Opening of session.

UNIVERSITY OF LONDON, University College, W.C.1. Opening of Session. Students received by Provost and Professors, 10 a.m. to 1 p.m. **10 a.m.**

TUESDAY, OCTOBER 8

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.7. Last day of entry for R.I.B.A. Intermediate Examination.

UNIVERSITY OF LONDON, University College, W.C.1. Students received by Provost and Professors. 10 a.m. to 1 p.m. **10 a.m.**

WEDNESDAY, OCTOBER 9

UNIVERSITY OF LONDON, University College, W.C.1. Students assemble for Evening courses in architectural design and architecture atelier. **5.45 p.m.**

THURSDAY, OCTOBER 10

BEDFORD COLLEGE, Regent's Park, N.W. Opening of Session.

UNIVERSITY OF LONDON, University College, W.C.1. Commencement of series of Thursday lectures on "The History of Decoration," by Professor Sir Flinders Petrie. **2.30 p.m.**

SATURDAY, OCTOBER 12.

Sunrise, 6.17. Sunset, 5.15.

TUESDAY, OCTOBER 15

UNIVERSITY OF LONDON, University College, W.C.1. "The History of Greek Sculpture." By Professor Bernard Ashmole. **3 p.m.**

THURSDAY, OCTOBER 17

ARCHITECTURE CLUB. At the London School of Economics. Supper Discussion. Report as to arrangements. **5.45 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. **12 noon.**

FRIDAY, OCTOBER 18

TRADES TRAINING SCHOOLS. Presentation of Prizes at the Carpenters' Hall, London Wall, E.C. **8 p.m.**

SATURDAY, OCTOBER 19.

Sunrise 6.30. Sunset, 5.0.

MONDAY, OCTOBER 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. 12 noon. "Architecture." By L. O. Faraker. 3 p.m. **12 noon**

UNIVERSITY OF LONDON, University College, W.C.1. "The Elizabethan House." By Arthur Ashmole. **2 p.m.**

FRIDAY, OCTOBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chinese Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

WEDNESDAY, OCTOBER 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

MONDAY, NOVEMBER 4

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last date for entry for R.I.B.A. Final Examination.

THURSDAY, NOVEMBER 14

THE ARCHITECTURE CLUB. Dinner at the Savoy Hotel.

FRIDAY, NOVEMBER 15

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. "Romance of Lead in Industry." By E. Holden, F.COLL.H. **3 p.m.**

MORLEY COLLEGE, Westminster Bridge Road, S.E.1. "Housing." By E. D. Simon, M.P. **8 p.m.**

Secretaries of architectural and allied societies are invited to forward particulars of their forthcoming meetings and visits for publication on this page. They should be addressed to the Editor at 9 Queen Anne's Gate, S.W.1.

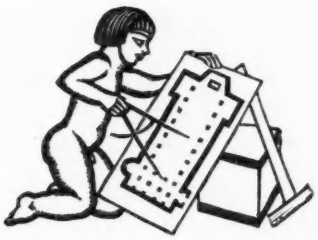


THE ERA OF STEEL.

This huge steel girder, recently placed as a shore across Threadneedle Street, about thirty feet from pavement level, is probably unique, as being the first of its kind to be erected over a main thoroughfare, though timber struts are occasionally seen, as at Bouverie Street, E.C. The girder stretches from No. 41 Threadneedle Street to the corner of Lloyds Bank opposite, and has been installed as a precautionary measure in connection with building operations on the site of No. 34 Threadneedle Street.

Thus, even for temporary strutting wood is being displaced by steel. This is due partly to the unreliability of wood to withstand pressure, and partly to the immunity of steelwork from some of the most inconvenient effects of moisture. Further, at the present rate at which timber is being felled, there is every likelihood of a very serious shortage, with the result that substitutes for the purposes for which wood is now used will have to be found.

THE ARCHITECTS' JOURNAL



WEDNESDAY, SEPTEMBER 25, 1929

"THESE TECHNICAL FETISHES"

The Electric Power Skeleton in Rural England and Wales

THE mischief of modern "tendencies" or "movements" is that they nearly all cancel one another out, and the end is futility. There is no supreme tendency or all-powerful movement. For instance, the tendency to live farther from town is cancelled by the movement against domestic drudgery, and so we end as we began in Upper Tooting, surrounded by all the services; and the ultra-velocity movement on the new arterial roads, which we dreamt would bring us weekly to the sea, is made slower than Sancho Panza's mule by the congestion of traffic.

A similar evil fate is overtaking two other good things, which, miles apart in conception, have come into sudden conflict in this crowded island of ours. We refer to the electrification of industry and the preservation of Rural England.

The case for the supply of electric power at a reasonable cost has been argued in Parliament by politicians who look for the greatest good of the greatest number, especially of politicians, and has been treated in the daily Press to indiscriminate praise. A semi-official Electricity Board was set up, on the edge of Whitehall, to bring the scheme as a whole into realization. Sources of power, costs, and routes were explored; apparently everything was thought of, especially the great deal of advantage the schemes were to bring to that nebulous being, the Public, by which is meant us, dear reader; but, unfortunately, the Electricity Board did not ask us what we thought about the routes and designs of its standards which convey the current across country, or the appearance of its power-houses which manufacture that current. These etceteræ of the electricity schemes, these technical fetishes, as Professor Patrick Abercrombie calls them in a letter to *The Times*, we are not prepared either to tolerate as litter or to worship as local deities.

A row of iron standards striding across a plain as flat and treeless as Russia may add interest to that singular landscape; but our electric mandarins have to deal with an island of much variety, about which when boys they learnt a little from Shakespeare. They would build a cloud-compelling power-station at Brighton, a town which has a romantic attraction for millions of poor and happy people; and from that station they would run their skeletonic fetishes across Sussex, beloved by many just men, and fix there the symbols of a rusty materialism. They have an even more dubious scheme for North Lancashire. In Wales they have already festooned the mountains with cables.

We think that North Wales is in many ways the worst case. For here we have still among us large tracts of land with no other hint of commercialism. The processes of agriculture, owing to the hilly nature of the country, continue in the old classic manner, and a feeling of antiquity hangs round the high and windy fields. The harvest is cut with scythe or reaphook, and the sheaves are bound by hand. Sheep wander through the hills as they wander through the Psalms of David, and men are much in company with dogs and horses and birds. In some lonely valley the wooded slope is overgrown with long moss like yellow hair, falling to shroud the tree trunks and the branches, and lying over the primeval boulders; except where a thin white stream of water drops and, echoing some old name, keeps its ferny channel green; it is the country of the Morte d'Arthur, and we deny all science and all engineering and all industry the right to effect the death of Wales.

How, then, are these electricity schemes to be reconciled with the saving of the country, as country? First, we ask the Electricity Board and its kindred undertakings to re-examine its routes and plans, with the help of competent advisers as to local amenities. The C.P.R.E. will doubtless do all it can, if consulted. Secondly, it must be recognized that natural beauty has a spiritual effect for good far transcending any material effect of hard cash through electricity, and that this may mean the abandonment of certain schemes. Thirdly, technical skill must literally leave no stone unturned to bury its cables.

NEWS & TOPICS

MR. JOSEPH EMBERTON SPEAKS OUT

MR. JOSEPH EMBERTON, the downright modernist architect who designed the latest extensions of Olympia, had some salutary and stimulating things to say about new buildings in London during an interview he gave to a much astonished *Evening News* reporter last week. The mischief only too apparent on many recent London façades, he finds, is owing to there being so many people about with "half-trained or æsthetically warped eyes." The man in the street, "who has not dabbled in art," is for him the best and ultimate judge. It is the architect, rather than his client, who wants the stone veneer which sheathes his steel and concrete building to "look thick," and reduces light by setting back its windows to create a fraudulent impression of massive masonry. London's besetting architectural vice, this ardent admirer of Mendelsohn's work insists, is that tacit confession of architectural incompetence which expresses itself in "a rash of unnecessary ornament": a form of "camouflage" that is invariably unsuccessful. Such camouflage is like trying to deflect attention from the fact that your motor car is of an obsolete model by sticking a conspicuous mascot on its radiator. The better the car the harder it is to find a mascot that does not look foolish on it. Where, for instance, could you put a mascot on the 5½-miles-a-minute seaplane which won the Schneider Trophy? Very happily, Mr. Emberton compares "the false, Renaissance-nurtured beauty" of this silver trophy with its pretty-pretty angels "kissing each other in a welter of curly hair and curly waves" to the essentially modern grace of the stark power personified by the S 6 itself.

OBSOLETE EPSTEIN

Mr. Emberton looks forward to the day when there will be no more "sham Renaissance stuff" or sculptural ornaments "in the uneasy transitional style of Mr. Epstein, who still clings to recognizably human forms." In this new London a building that has had its day will be ruthlessly pulled down and superseded by a better one. There will be no expensive "titivating" with obsolete edifices such as the Houses of Parliament or Waterloo Bridge. The latter he describes, characteristically, as "a thing of past beauty" which had proved its obsolescence and inadequacy by threatening to collapse. Such a bridge should be "destroyed at once" to make room for one representative of that modern beauty "born of efficiency." Factories will no longer be run up haphazard and then let to serve indiscriminately for bottling pickles or grinding optical glass, but will be built only after very careful study by their architects of the needs of the particular industries they are intended to house. "Let us forget obsolete art forms (and obsolete materials such as stone)," Mr. Emberton concluded, "and build (in reinforced concrete) for a saner, cleaner, and happier world by concentrating on the best possible solutions of our problems." There will certainly be plenty of work for the profession in that better and brighter world. I only hope this architects' millenium may be as near as he believes it to be. Meanwhile I trust Mr. Emberton will help to hasten its advent by giving the Press more of these heartening "Pizgah Sights." Plain speech such as his is badly needed.

THE OLD TIDAL MILL

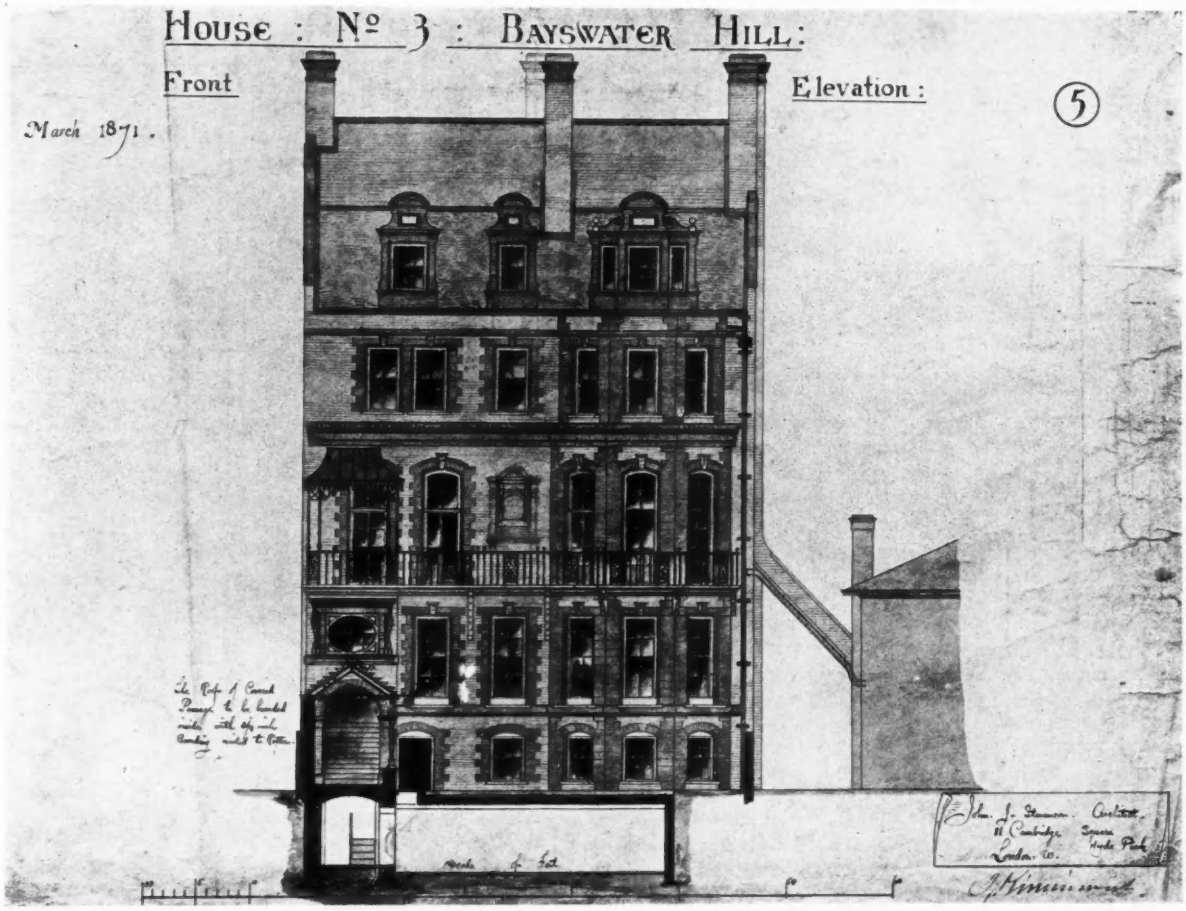
I notice that the Essex County Council disclaim responsibility for the threatened demolition of the delightful old tidal mill at St. Osyth. The bridge and road there, it seems, is not a county, but a local affair. It is still to be hoped that those responsible will see their way to retain on this interesting little creek the mill which is so fascinating a feature of the landscape, and so closely associated with the history of the village. Even if we can go many steps faster and farther than our forefathers could, yet they were, after all, not lacking in ingenuity, and knew how to harness the forces of Nature. Only a few years ago I saw the mill actually at work producing flour. It had just been repaired, and a fine new wooden wheel had been put in. *Sic transit gloria mundi* when the chief glory of the modern world is transit! And now even the Society for the Protection of Ancient Buildings, although it "would regret the loss of so picturesque a building," does not feel justified in taking any public action against its demolition, though we have yet to learn the final attitude of the Society for the Preservation of Rural England on the subject.

A BAYSWATER BOX OF BRICKS

In Bayswater and a few kindred districts the mid-Victorian tradition lingers even in the façades of some twentieth-century buildings. There are still little brick niches of a particular type, iron balcony railings, discreet steps up to front doors and down to basements; and there are still mild echoes of exuberant flourishes that are neither Gothic nor Classic, English nor Dutch. Perhaps in no one existing building can this particular mid-Victorian phase be so well studied as in the design (page 447) from the Victoria and Albert Museum. The drawing bears the date 1871 and represents the design by John Stevenson, Architect, for the street front of a house in Bayswater Hill. One of the facts about this drawing which gives food for thought is its age. Sixty years is the normal age of retirement for public servants. But although this design lacks something of sixty years, it is quite obviously "retired." It is impossible to approach it with such standards of appraisal as one would apply to a design possessing the quality either of antiquity or of actuality.

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The house front is not superannuated in the sense that it lacks practical expression of life today, or rather of life in the pre-motor era. One can readily imagine an open barouche "setting down" at the streetward end of the "covered passage boarded inside with ¾-in. boarding nailed to rafters," noted on the drawing. The design is simply out of touch with the habits of architectural thought of this clearer-thinking generation. It is the sort of façade which must irresistibly suggest a box of toy bricks. It is of course quite reasonable that it should be so. For the boxes of bricks with which one's own generation played were designed, not even on the lines of houses then being built, but like those in which grown-up designers of toys had grown up. So it is excusable that, in examining this elevation, one should catch oneself counting the special "features" to see whether they are the kind that come in pairs or in ones, packed in distinguished aloofness amid the common ruck of bricks, in the fragile box whose highly-coloured lid displayed the only house design that would



Design by John J. Stevenson, Architect, for the street front of a house in Bayswater Hill, in the Victoria and Albert Museum.

use up all the bricks and no less, all the elabo ate decorative features and no more. The house is a p tchwork of samples, and because of its evident consciousness of gentility it cannot reach the fringes of nobility.

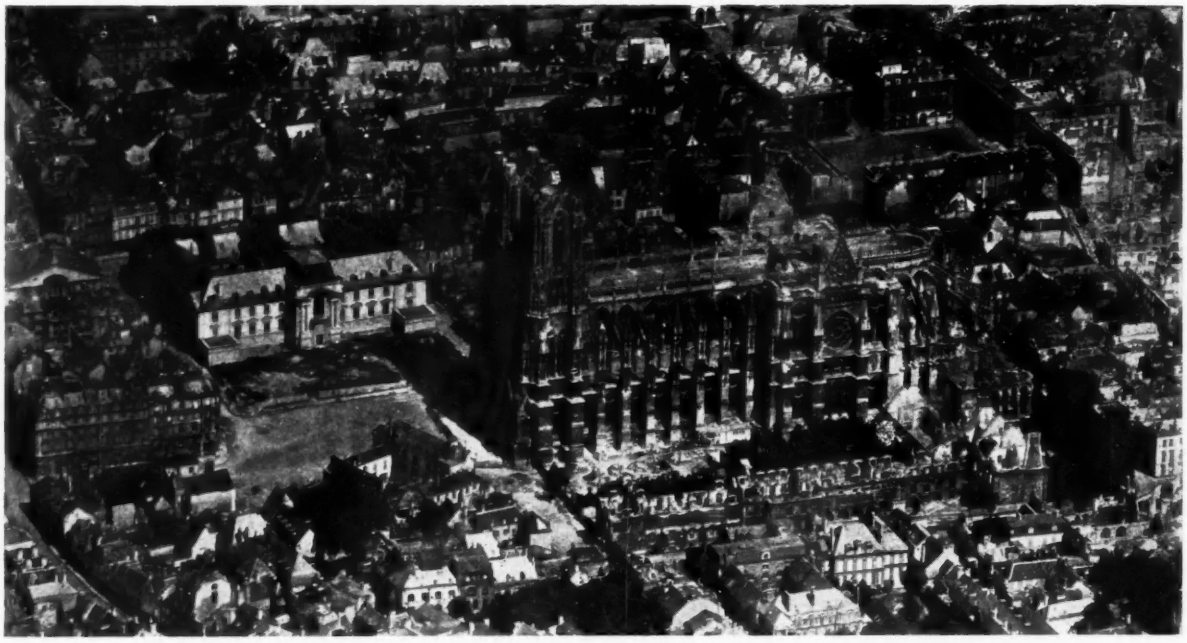
THE ANCIENT MONUMENTS COMMITTEE

It is now over eight years since the Ancient Monuments Advisory Committee, appointed by the First Commissioner of Works—at that time the Earl of Crawford and Balcarres—issued its report, of which the appointment of the Royal Fine Arts Commission is, so far, the sole outcome, unless we except Diocesan Advisory Committees. The terms of reference were as follows : " 1 : To advise on the question of amending and strengthening the existing Ancient Monuments Act; 2 : to consider whether the powers conferred by Parliament should be widened, so as to include advisory powers over ecclesiastical and secular buildings which are still in use and occupation." With the permission of the Controller of H.M. Stationery Office, Mr. John Swarbrick, the Editor of *The National Ancient Monuments Review* publishes the report *in extenso* in the current number of that Quarterly. In a footnote he gives as his reasons for doing so not only the fact that less than fifty copies of the original publication were recently in print but more particularly the lack of progress made in adopting the greater part of the recommendations made by the Committee. I think he might have added, as a further and still more cogent reason, the steady growth of interest in the question during more recent years.

★

The report, in its first two parts, deals with the position of the State with regard to ancient monuments, and legislation in foreign countries (i.e. Austria, Belgium, Denmark, France, Germany, Greece, Hungary, Italy, Sweden, and Great Britain). Summarized, the information, collated with commendable thoroughness, shows " . . . that while the definition of a monument is everywhere much the same, a distinction is made in practice between monuments in private ownership and those belonging to public or corporate bodies. The British distinction between monuments in use and those no longer used is not recognized," and the Committee expresses the opinion " . . . that on logical and practical grounds the advantage is with the Continental conception. Other provisions, which I find are not found in British law, are : 1 : Control of movable objects; 2 : preservation of scenery where it affects the amenities of a monument; 3 : financial help to private owners for the preservation of monuments in their possession; 4 : compensation. . . ." In Part III of the report four important amendments are suggested, and in Part IV the vital question of " . . . the advisability of extending the scope of the Act to include ecclesiastical and secular buildings which are still in use and in occupation " is thoughtfully considered, and recommendations made.

ASTRAGAL



An air view of Notre Dame, Rheims. The new framework of reinforced concrete for the restoration of the Cathedral has been executed by Henri Deneux, chief architect of the Historical Monuments of France.

A PILGRIMAGE TO RHEIMS

The New Roof Framework for the Cathedral of Notre Dame

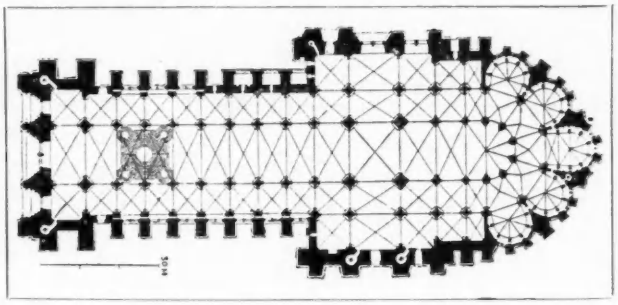
BY CHARLES IMBERT

A VISIT to the new Rheims of today must necessarily be undertaken with very mixed feelings. The Rheims of before the war was a vision that could never be forgotten, and the magnificence and beauty of the past are bound to haunt the visitor of today and make him wonder whether this greatest of masterpieces is likely still to merit its name. After a recent pilgrimage, I believe I may affirm that Notre Dame of Rheims, thanks to the devoted efforts of some and the generous aid of others, may continue today to be a fruitful lesson to the world.

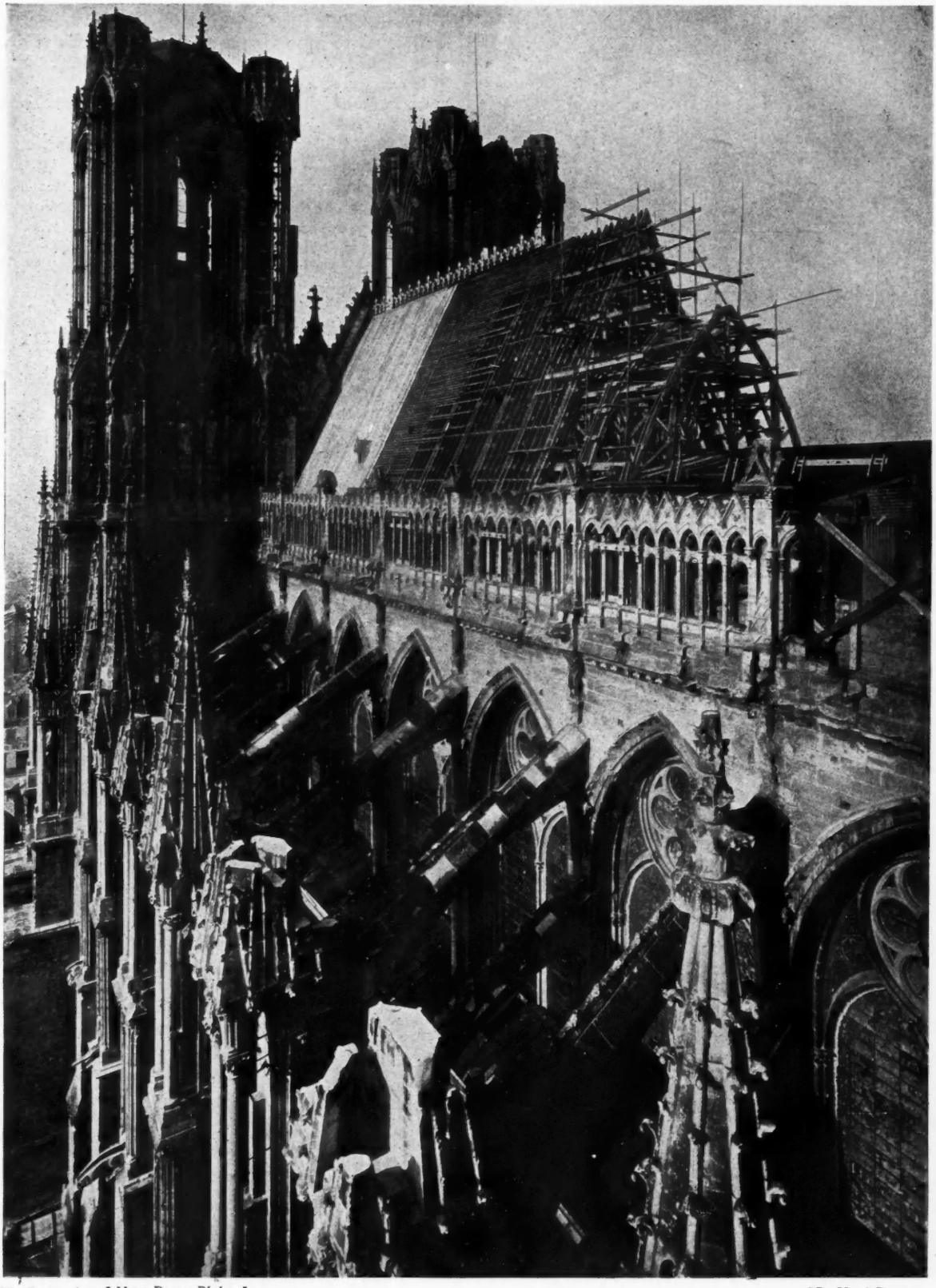
My object is to give an account of the new framework in reinforced concrete which the chief architect of the Historical Monuments of France, Henri Deneux, has conceived and executed for the restoration. I met the architect at the workshop of the cathedral, at the foot of the edifice, in the outbuildings of the ancient Archbishop's Palace, which he is also restoring. We entered his office, where we were surrounded by books, plans, models in wood, a number of mouldings, etc., all connected with the buildings of which he had the charge, and forming a fitting and picturesque decoration of the room. I found with him Madame Deneux, his helpmate in the most literal sense of the word. The models of the framework, which look like delicate toys, are executed by Madame Deneux, generally according to her husband's directions. These little rough models serve the workmen in the execution of their work. Sketches or drawings are comparatively restricted in number. Deneux believes that the workmen understand much better what they have to do by making use of these models.

And now let us go and see those little things when they have grown up, so to speak. Let us go under the roof of the cathedral. *Seven* flights of steps (is this a symbolical figure?) lead to the higher parts of the building, built with the superb stone of the "Mountain of Rheims," the quarries of which are still worked and supplied the first stones of the ancient cathedral.

Under the guidance of Deneux we arrive a little below the level of the triforium of the cathedral, at the base of the scaffolding, which begins eighteen metres above the ground floor. This scaffolding rests on the galleries of the triforium. It serves as a support to the temporary arches on which the high vaults are being constructed. This very light scaffolding is easily taken down, which permits of its rapid transfer from one place to another. An articulation, more or less based on the system of our architect's compass, is its chief characteristic.



Ground-floor plan of Notre Dame, Rheims.



The Restoration of Notre Dame, Rheims. [*By Henri Deneux.*

A view of the reinforced concrete framework supporting the light timber rafters and battens to which the lead roofing is attached, in the course of the restoration of the roof. Two hundred and fifty tons of the ancient lead used at the time of the re-making of the roofing after the fire of 1481 were collected and used again. Before use it was re-melted and no better process was found than that in vogue in the Middle Ages of French history.

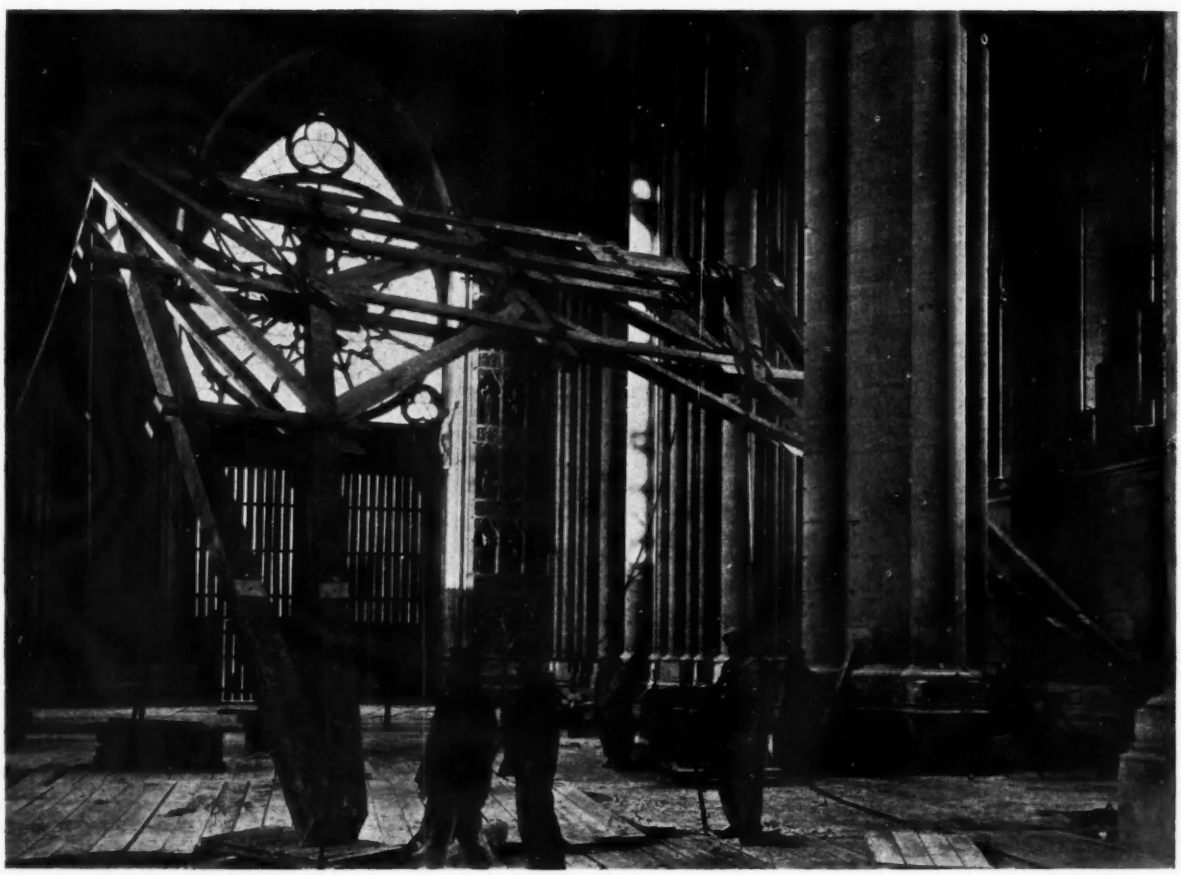


Workmen engaged in mounting the scaffolding framework. The work was built up in small sections.

We now mount higher to see the framework of the great nave. It is a novelty on account of the use of reinforced concrete, made elsewhere in sections, to be joined together afterwards so as to form a whole. The reason why wood has not been used is that the new style of vaulting minimizes the danger of fire, and obviates the difficulty of finding wood of the right lengths and in sufficient quantity. It is also much easier nowadays to find workmen perfectly capable of doing this style of work than to find good carpenters.

On seeing workmen making these parts, the heaviest of which can be carried by two men, one realizes how much more easy, rapid, and economical this work is than the older system. As there are a great number of like parts, the number of mouldings is limited, thus avoiding the danger of errors. All these elements are easily taken down and put up again on account of their small dimensions. It is repetition work similar to that in vogue for making the different parts of most machines nowadays. Another indisputable advantage is the freedom from that obstruction which was formerly almost inevitable. As regards wood, there are only the flat pieces to which the sheets of lead are attached, with their light supports. All the rest is of reinforced concrete, including the little elements which serve to join all the others together.

We pass on above the high vaults. Here at first the original project, for want of resources, was to make a terrace of reinforced concrete. Thanks to the generosity of Mr. Rockefeller, the framework could be taken in hand. That of the great nave was completed in thirteen months. But the "terrace" first projected will be made all the



The Restoration of Notre Dame, Rheims.] [*By Henri Deneux.*

The hoisting of the scaffolding. This very light scaffolding is easily taken down, which permits of its rapid transfer from one place to another.



The Restoration of Notre Dame, Rheims.] [*By Henri Deneux.*

The lower part of the reinforced concrete framework of the nave, showing the stone corbels which receive it.

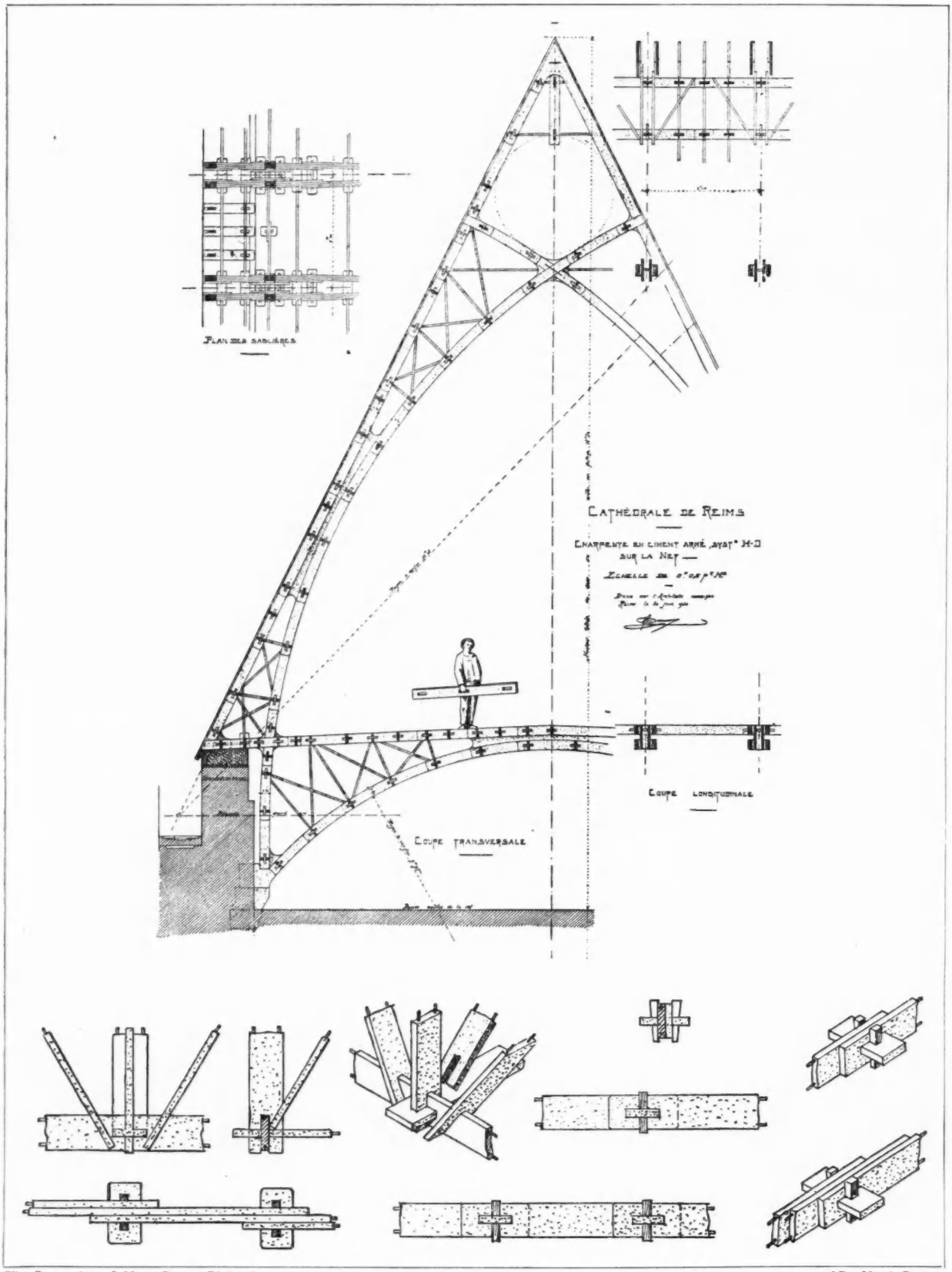
same. Looking at the framework of the great nave, it seems to me that if the carpenters of other times had seen it they would have approved it. It is a laudable piece of work, which makes an impression of beauty as a whole and is light of aspect, thanks to the system of employing pieces of small dimensions which are doubled or trebled as needed. Good use is made of the under part of the roof, at the top, where one can walk easily.

The way in the middle of the axis of the nave serves also as a passage for the wires bearing the electricity used in the lighting of the interior of the cathedral. The stones in the centres of the vaults are scooped out, and lamps are placed in them. The light is diffused through the upper parts of the church by means of a slab of glass inserted in the orifice under the lamp. Thus clumsy pendants, which interfere with the harmonious lines of the vaulting, are avoided. This passage through the framework of the roof is a very useful and important structure. It is very well lighted by its dormer-windows, which are not glazed, thus ensuring the indispensable ventilation. They are simply provided with gratings to prevent the entrance of birds, which, though not dangerous in themselves, might bring in inflammable materials to build their nests. When speaking of the lightness of the new framework, Deneux cited the eloquent fact that it had three times less volume than the old, and that it did not weigh any more. The parts of the cathedral not yet roofed are temporarily covered with sheet-iron.

A few words about the roofing itself. It is a curious fact that a considerable part of the lead used, particularly for the aisles, is the ancient lead. Two hundred and fifty tons of this lead were collected and used again, after re-melting it of course; but no better process was found than

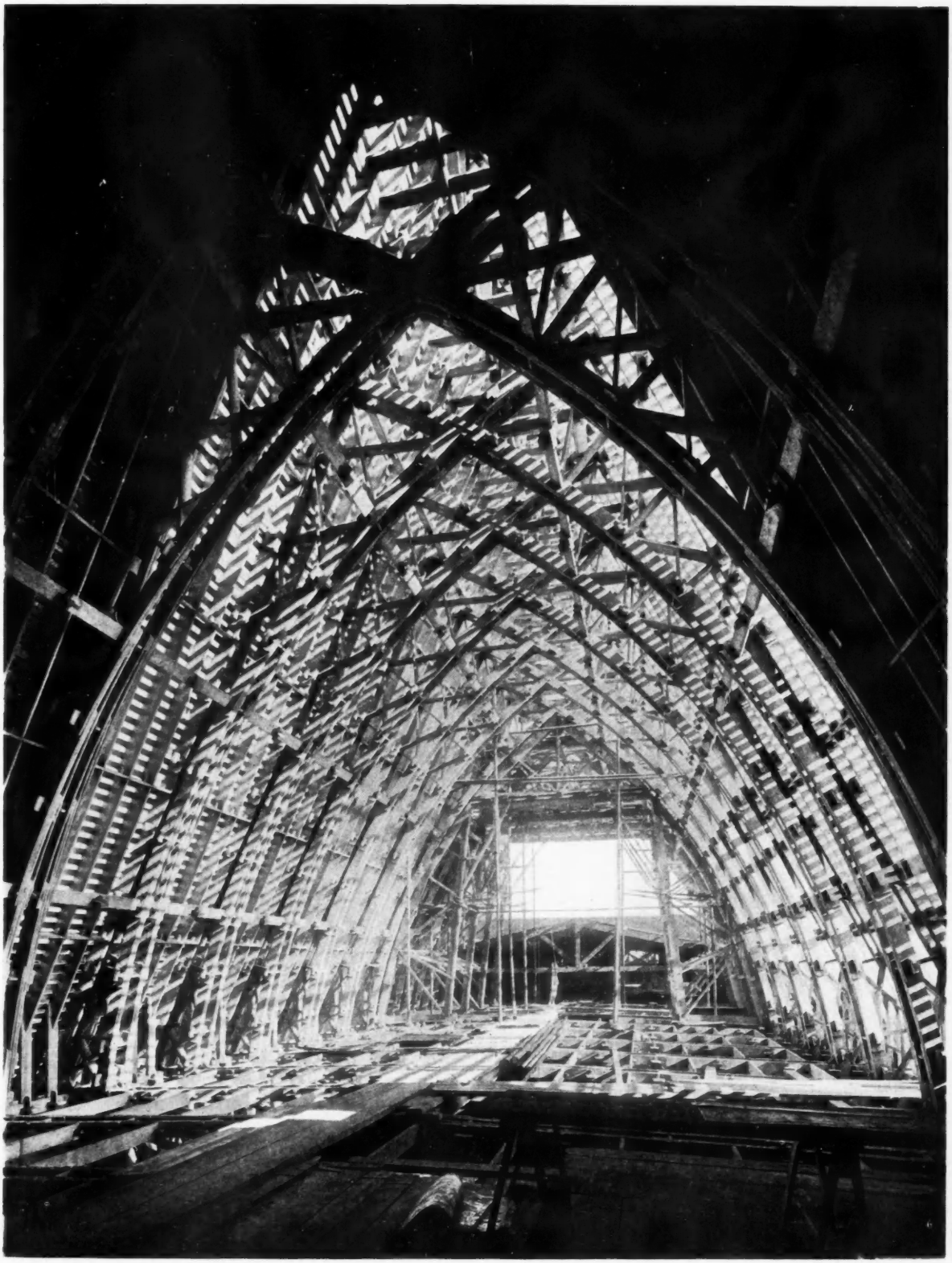


The framework above one of the side aisles.



The Restoration of Notre Dame, Rheims.] [*By Henri Deneux.*

The architect's plans and sections of the roof framework and details of the jointing.



The Restoration of Notre Dame, Rheims. [*By Henri Deneux.*

An interior view of the roof framework over the nave, which was completed in thirteen months. "It is a laudable piece of work, which makes an impression of beauty as a whole and is light of aspect, thanks to the system of employing pieces of small dimensions which are doubled or trebled as needed."

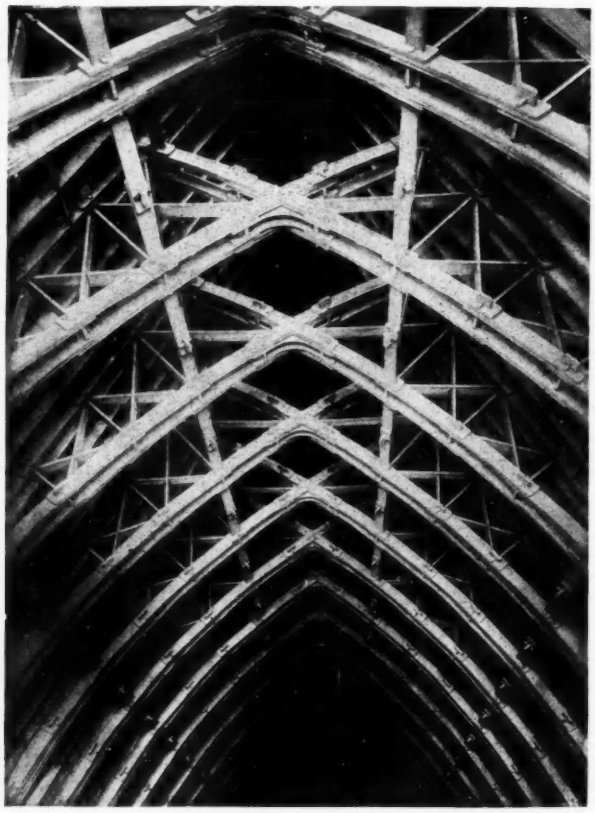
that in use in the Middle Ages of French history! This ancient lead, used at the time of the re-making of the roofing after the fire of 1481, in the reign of Louis XI, was alloyed with antimony and silver, which greatly improved its quality. It probably came either from Spain, Holland, or England; perhaps from the old Cornwall tin mines well known in the time of the Cæsars. Thus England had then already furnished, in all probability, an element of great value in the carrying out of the construction of Notre Dame; a glance at the cathedral shows the importance of the roofing as in all the edifices of the same period. The plates of lead are laid on planks with spaces between, in order that the lead should be "aired" on both sides, that it should "breathe"—to use the trade term.

Another piece of work made of lead is an innovation. It is the ornament of fleur-de-lis and trefoil, which crowned the point of the roof and which was destroyed during the Revolution. The trefoil, in truth, existed afterwards, but the royal "fleur-de-lis" did not find favour with certain patriots of that time. Our third Republic has fortunately been more tolerant than the first. The fleur-de-lis has been reconstituted from old sketches. It measures 1 metre 32 centimetres from the point of the roof to the top of the fleur-de-lis.

We now start for the ground below, traversing the little world of the upper nave and admiring the activity of the workers on the way. One would like to tell the history of the ancient framework of Notre Dame, and to evoke souvenirs of the master carpenter, Collard Lemoysne, who died about 1485, and of those who continued his work—Jehan Arnault, Jehan Baudon, Jehan Royer, Jehan Rolland; and of him with the symbolical name, Pierre de la Forest. One would also like, in the workshop where the remnants of sculpture saved from the burning are kept, to repeat the words which these works of art, mutilated as they are, seem to suggest.

To return to architecture and the new style of framework, I may state that the old church of St. Jacques at Rheims was the first to which Deneux applied his system.





The Restoration of Notre Dame, Rheims.] [*By Henry Deneux.*

Two views of the roof framework showing how the parts are doubled or trebled as needed.

This framework was executed in 1920-21. It is but just to recall that the idea of restoring, or rather of remaking the framework, destroyed in the war, of these Rheims churches, comes from Charles Gennuys, general inspector of historical monuments, whose teaching at the "Arts Décoratifs," of which he was manager, formed so many justly-famed practitioners.

In closing, let me recommend all who can to visit this fine building. They will not regret their journey, and will certainly return to see Notre Dame again when it has resumed all its old, unique beauty. The cathedral is, as Louise Lefrançois-Pillon has so well expressed it, "an incomparable revelation of beauty, harmony, luxury and refinement. In a word, the introduction to an enchanted world."

LONDON ETHICAL SOCIETY'S NEW HOME

DESIGNED BY F. HERBERT MANSFORD

CONWAY Hall has been erected for the South Place Ethical Society to supersede their old and somewhat historic chapel in Finsbury, recently demolished. It stands in Red Lion Square, Holborn, W.C., and is intended for the Society's services and activities, but will also be let for concerts, dances, dramatic performances, etc. The need for economy restricted the building in size, and a small portion of the site remains unbuilt upon and is available for extension. These considerations naturally affected the design, as also did questions of ancient lights and the regulations of the L.C.C. governing buildings licensed for music and dancing.

The narrowness of the frontage to the square and the limitation of height in Lamb's Conduit Passage made an effective and harmonious elevation difficult. This was partly overcome by the purchase of six large stone vases from the Union Bank, lately in course of demolition in the City. These helped to unify the two elevations without affecting rights of light. The silver-grey facing bricks of the general walling are relieved by the concrete plinth with exposed aggregate bands of Portland stone and red brick dressings.

The large hall seats 503 (325 on the ground floor and 178 in the balcony) and is provided with exits in three directions. The walls below the balcony and around the platform are lined with oak-faced panelling, $1\frac{3}{4}$ inches thick throughout, and fixed directly to the walls without any intervening space. The concrete balcony front is faced with oak plywood. On the recommendation of Mr. Hope Bagenal, who was acoustic consultant, all the panelling around the platform has been tongued to the floors. The plaster above is hard, but at the opposite end of the hall acoustic plaster has been used. There is a clubroom above the platform. In addition to the special precautions taken to check the passage of sound, the walls and floors have been disconnected as far as practicable. The large hall has a floor measuring 52 ft. long by $45\frac{1}{2}$ ft. wide, a proscenium 27 ft. wide, a platform 40 ft. wide by 13 ft. deep, lantern sheet and optical lantern, dressing and cloak rooms, and accommodation for refreshments.



The main entrance from Red Lion Square to the new premises for the South Place Ethical Society. The façade is of silver-grey facing bricks, relieved by a concrete plinth with exposed aggregate, bands of Portland stone and red brick dressings.

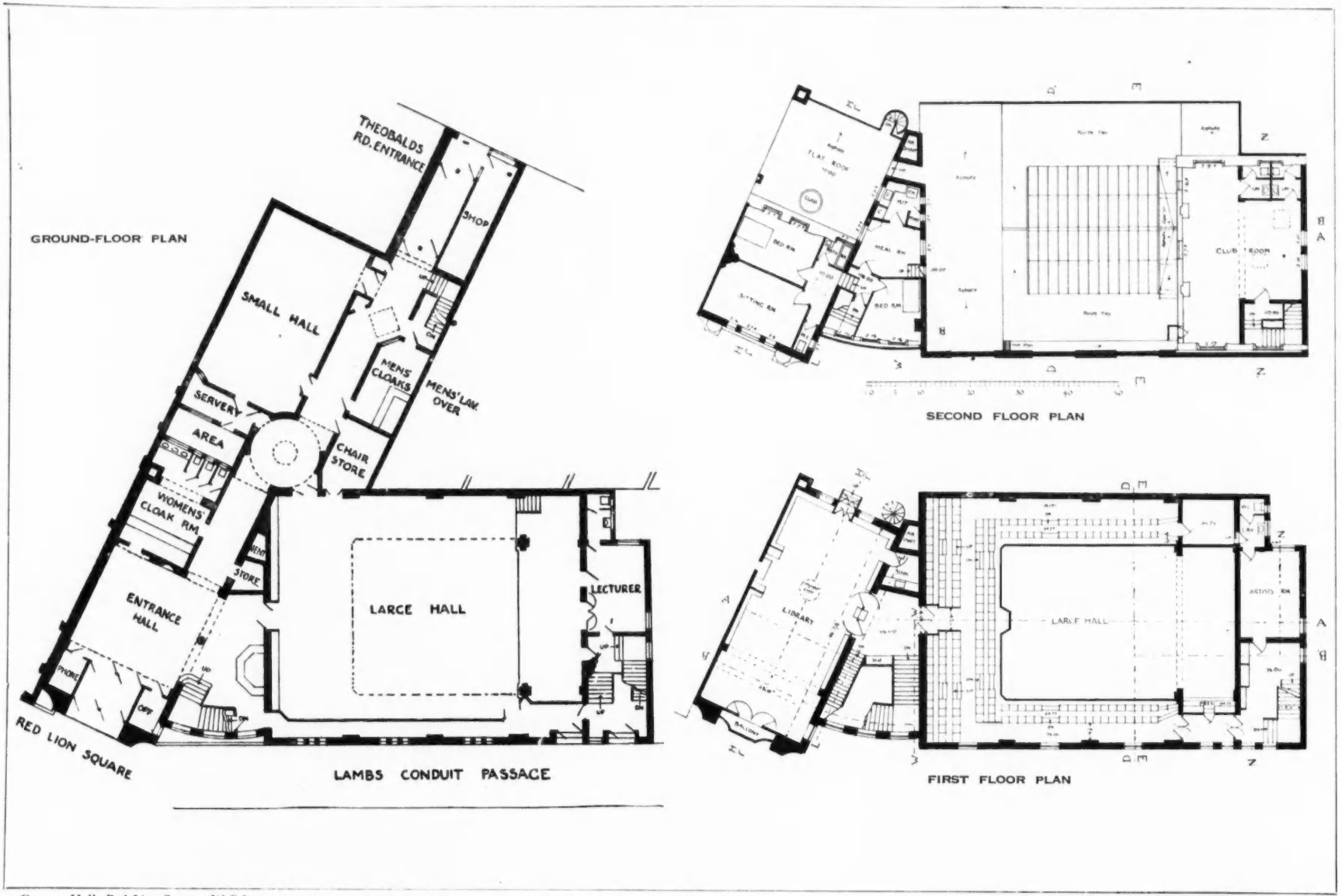
The small hall seats 100. It has top side lighting and is suitable for small art exhibitions. A servery attached enabl s refreshments to be prepared. The seats here are of steel framing and readily removable.

The library, 46 ft. by 23 ft., is on the first floor. It contains a memorial fireplace of black marble with oak surround, relieved with blue tiling and carved gilt inscription. The top of the fireplace recess is intended to form part of a gallery which will be carried around the room should the need for more shelving arise.

Other accommodation includes a secretary's flat, caretaker's rooms, rooms for lecturers and artistes, cloakrooms, lavatories, boiler house, etc.

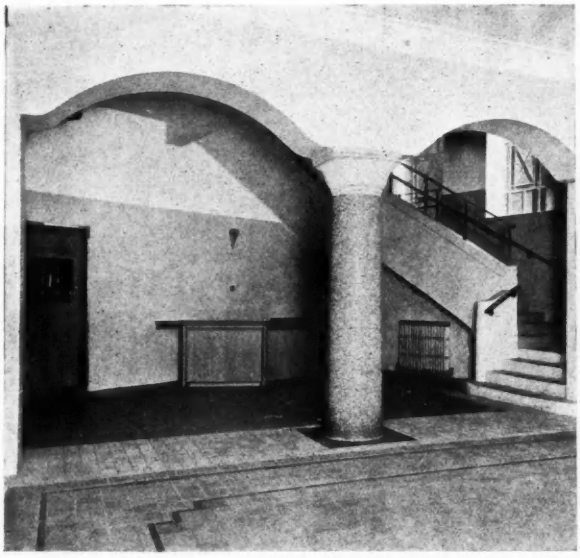
The ventilation system was arranged in consultation with Mr. J. Roger Preston. Air is drawn from above the roof down to the basement, where it is filtered and slightly warmed, and blown into the halls at a low velocity. There are also radiators and extract fans.

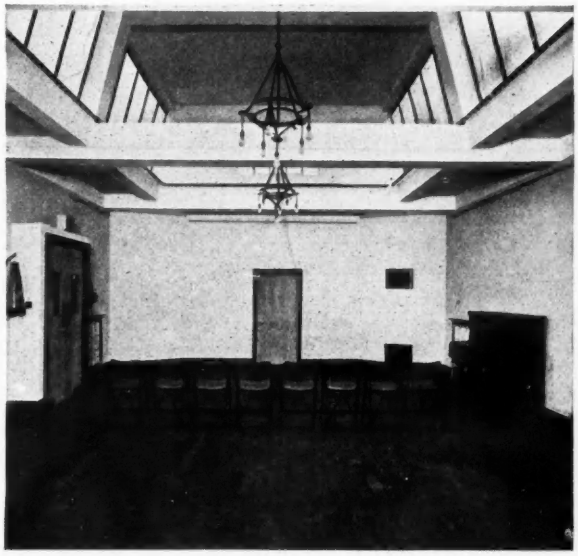
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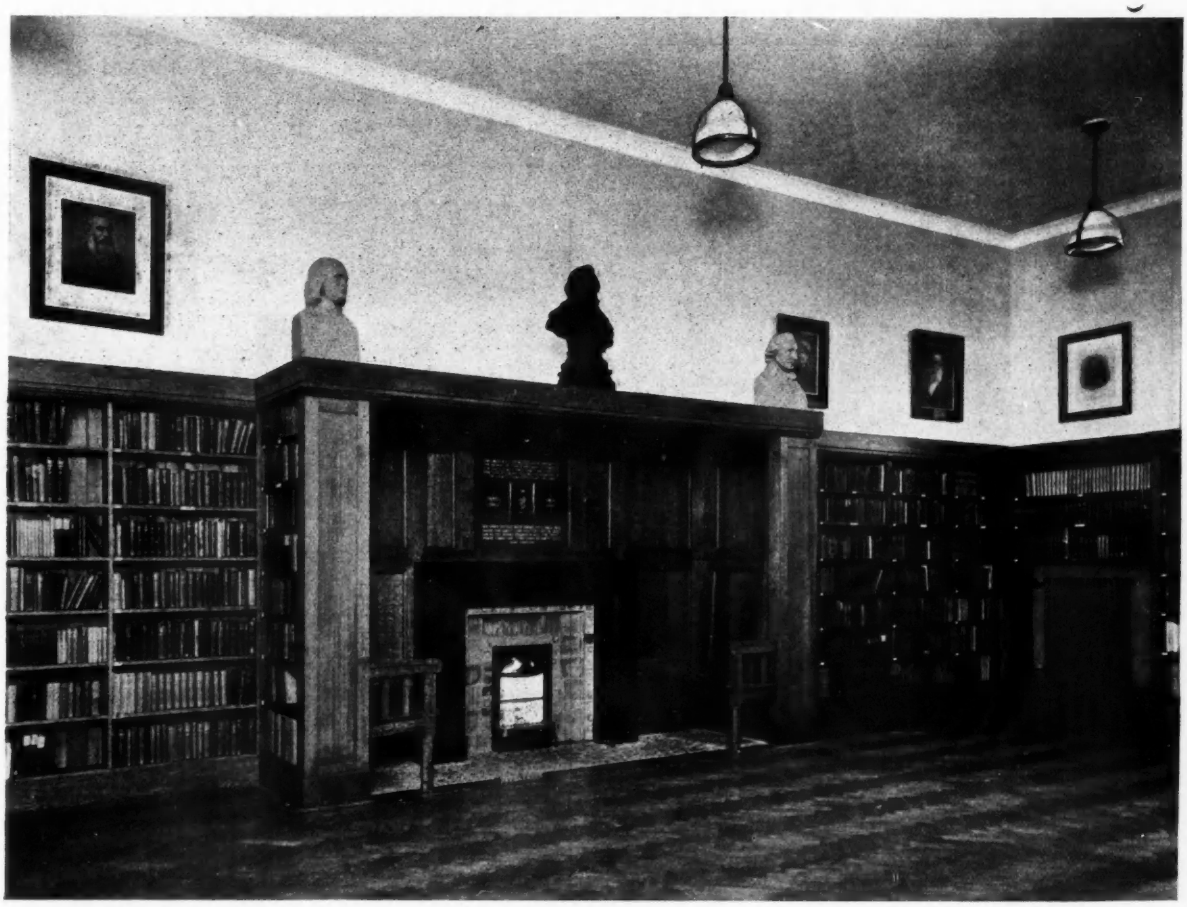
Conway Hall, Red Lion Square, W.C.] [*By F. Herbert Mansford.*

Conway Hall is the new home of the South Place Ethical Society and has been specially designed for their services and for use for concerts, dances and dramatic performances. The large hall seats five hundred persons and the small hall one hundred. Other accommodation includes the large library on the first floor and a club room on the second floor.



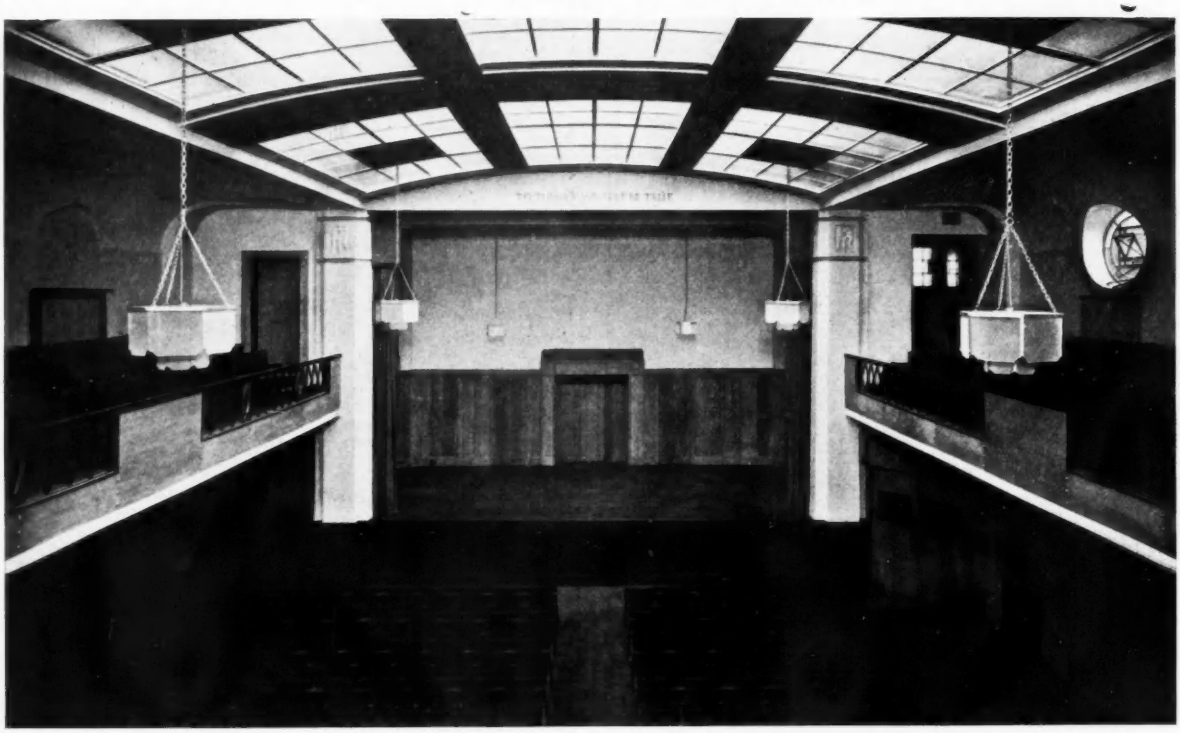


The entrance hall, and the small hall. Top side lighting is provided in the small hall to enable art exhibitions to be held. The seats are of steel framing and may be easily removed.

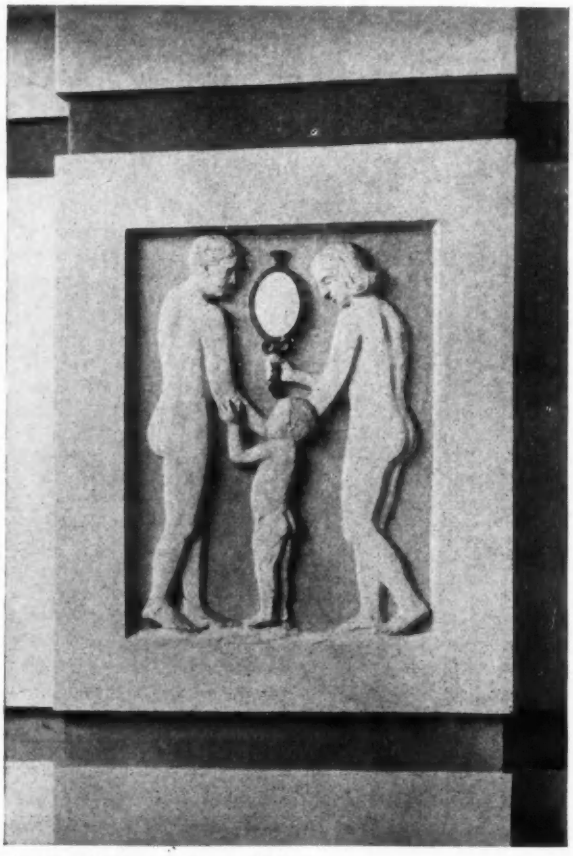


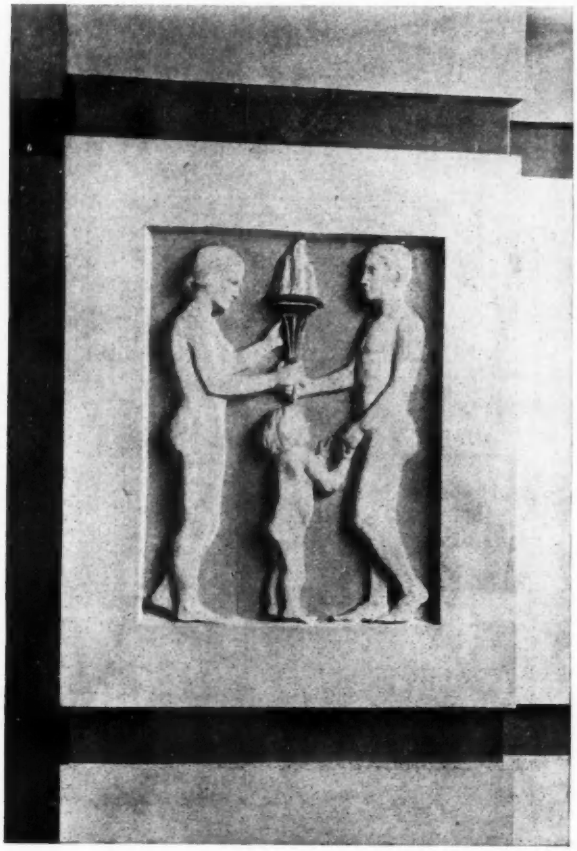
Conway Hall, Red Lion Square, W.C.] *[By F. Herbert Mansford.*

A feature of the library is the memorial fireplace, shown above, dedicated to John Aldred, who took a leading part in the formation of the Society. It is of black marble, with oak surround relieved with blue tiling and has a carved gilt inscription. The top of the fireplace is intended ultimately to become part of a gallery.



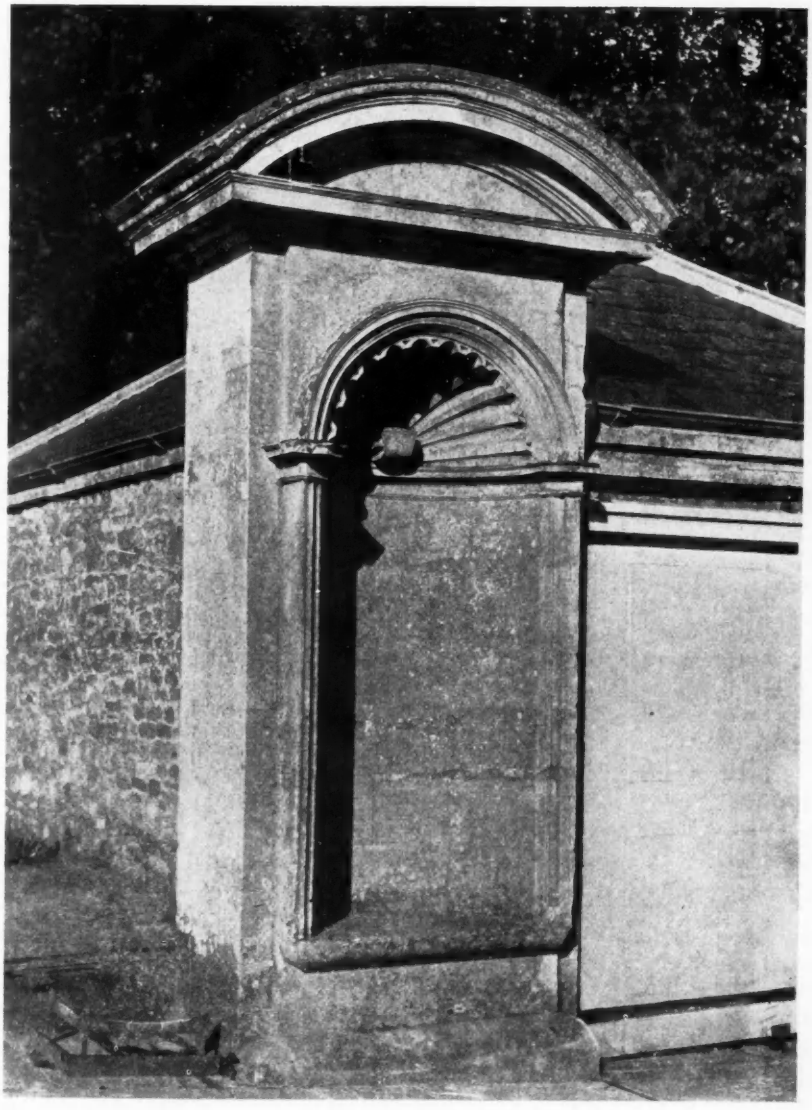
The large hall, looking towards the proscenium. Seating for three hundred and twenty persons is provided on the ground floor and for one hundred and seventy-eight in the balcony. The walls below the balcony and around the platforms are lined with oak-faced panelling. The balcony is of concrete, faced with oak plywood.





Conway Hall, Red Lion Square, W.C.] [*By F. Herbert Mansford.*

Two of the panels with designs of symbolic significance forming the capitals of the piers on each side of the proscenium opening in the large hall, modelled by Violet Stuttig.



ENGLISH PRECEDENT No. 83

A PIER IN THE KITCHEN YARD, COLESHILL HOUSE, BERKSHIRE

The entrance to the kitchen yard at Coleshill House is flanked by piers of which that illustrated is one. The ample niches are empty, but must surely once have contained sculpture, as still do the niches of the piers in the park wall there and at Thorpe Hall, near Peterborough. One must admire the spirit which provided even the least important side of the house with such handsome and vigorously designed piers.

—[NATHANIEL LLOYD.]

THE HONEYWOOD FILE

BY KARSHISH

XX: The Stairs Go Wrong and the Water Comes In

The roof is on and the inside work is going ahead. Grigblay, the builder, has no time to spare, so that if the smiths, plumbers, heating and electric and hot-water engineers, plasterers, carpenters, joiners, bricklayers and specialists of various sorts are not tumbling over one another, his organization must be good indeed. Brash, the client, his wife and the stranger within his (neighbouring) gates will not begin systematic explorations until the stairs are in and the floor boards safely down; for, apart from the perilousness of that adventure, there is "really nothing to see, yet." Spinlove, it seems, also finds something of the same difficulty in seeing things.

GRIGBLAY TO SPINLOVE

Dear Sir, 5/8/25

As you are aware, we are at work on the staircases, and we venture to call your attention to the headroom at No. 3 step of back stairs. We think you overlooked that the binder carrying partition runs across door-opening to bathroom, so that unless the bathroom floor is raised one step the binder must be dropped 5 in., and owing to the revised arrangement of the stairs shown in detail No. 27, we do not think headroom will be satisfactory.

Awaiting your immediate instructions,

Yours faithfully,

PS.—We shall be glad of a further certificate for £3,000.

Apparently Spinlove has done what it is perilously easy to do: he has improved on the contract in his detail drawings without investigating fully all the consequences of the change.

SPINLOVE TO GRIGBLAY

Dear Sirs, 6/8/25

I confirm telephone message directing all work on back stairs to be stopped. I note that the strings have already been got out and sunk, and treads of winders, etc., prepared, so that it is too late to go back to the arrangement shown in the contract drawings. I do not understand why my attention was not called to this matter when the work was set out.

I widened the landing at top to give more room for the swing of the door; this pushed the bottom step out and brought No. 3 step into the position of No. 2, so that it was obvious I had mistaken the position of binder. If you had called my attention to this at the time, the difficulty would not have arisen, as I might have managed with one step less.

I do not like the idea of raising the bathroom floor one step. Will you please return drawing No. 27. I do not at present see what can be done. A 9-in. steel joist in place of binder will not settle the trouble. You will notice that I splayed off the angle of the binder to ease the headroom, which I knew was tight.

Yours faithfully,

A ridiculous letter! It is clear Spinlove does not know what the devil to do and wants the builder to tell him. He allows us to suppose that in the contract drawings there was an 11-in. binder which carried 5-in. floor joists. This binder came below the ceiling and was probably cradled and finished as a beam. In making his detail he pushed the binder up flush with ceiling to give to the starved headroom the extra height required by the alteration in the steps; and overlooked the opening to the bathroom door across which the binder runs.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 6/8/25

Grigblay has applied for a further certificate for £3,000, which I have sent him.

I take this opportunity of enclosing particulars of my own fees, as arranged. The first item—4 per cent. on £18,440—became due on the signing of the contract. The second item, 2 per cent. on £7,000, is the residue of the 6 per cent. on value of work done.

I hope you like the dining-room fireplace which the bricklayers are finishing. The bricks are specially made for this purpose, and Grigblay has imported a particular bricklayer to carry it out.

Yours sincerely,

Two or three months ago Spinlove asked for a modest £400 on account of fees, and after waiting six weeks was fobbed off with £250. As we remember, he then promised to put the matter "on a formal business footing so as to prevent further misunderstandings." He now sends in an account for the fees which, by custom and under the Institute Scale, he is entitled to. The amount indicated is £876 less £250 already paid, or £626.

GRIGBLAY TO SPINLOVE

Dear Sir, 8/8/25

We regret to say that we have today learnt that the binder, floor and partition, are now all in place as shown on the contract drawings. Your drawing No. 27 gives exact particulars of the stairs, but the position of the binder is only slightly indicated. The section of it is not coloured on our drawing, and we had no means of knowing what your intentions as regards other parts of the work were. The binder had been prepared and sent on to the work, and probably fixed, before we received your detail.

It will be necessary either to scrap the strings and winders or take down the binder, etc., which will be the simplest way. We suggest that the difficulty could be got over by putting in a 5½-in. sill in place of binder and trussing the partition, which might also be hung up by tie strapped to purlin. The easiest thing, however, would be to raise the binder and floor. If you do not care to go up one step to bathroom floor, the bathroom might be entered from the corridor instead of the landing of back stairs, in which case the floor need not be raised with the binder. Drawing No. 27 herewith. We shall be glad of immediate instructions.

Yours faithfully,

Spinlove is a conscientious fellow and we may sympathize with his predicament. It is more than humiliating for him to scrap the strings, etc., for to do so will probably cost Brash £30. We know, too, that he was not satisfied with the contract arrangement. On the other hand, Grigblay's other proposals are all hand-to-mouth expedients or botches.

SPINLOVE TO GRIGBLAY

Dear Sirs, 9/8/25

I return drawing No. 27 amended. You will see the binder and bathroom floor are to be raised. It is a particular point of the plan that the servants' bathroom should open off their own landing and not off the main corridor, and, as it is only for the servants, the step will not matter so much [*ahem!*].

I consider that the discrepancy should have been pointed out to me, as this is a duty specially placed upon you by the contract, and it must be clearly understood that no extra is involved by the making good which I consider to have become necessary owing to your oversight.

Yours faithfully,

Spinlove is pushing things too far. The mistake seems to be entirely on his shoulders.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 10/8/25

You must permit me to convey to you that I did not at all anticipate that at this early period I should be requested to disburse so preponderant a proportion of your fees. I conceive I am correct in asseverating that

professional gentlemen are, by habitual custom, paid their fees *after* the services they refer to have been performed and not *previously* thereto. The mansion is a considerable distance—a very considerable distance I am led to apprehend—from being completed, and yet I am now requested to disburse a sum approximating to 80 per cent. of the whole remuneration eventually accruing to you when the works have been satisfactorily completed and your engagement with myself terminated. I confess that I am amazed at a claim which is—if you will allow me permission to so express myself—most extravagantly preposterous.

Although it is not a matter to which I should, under happier circumstances, desire to make deviation, I, nevertheless, consider that you are under serious responsibilities and obligations towards myself which, as in all such monetary matters, have a financial signification. I observe that the contract document protects me with a not unsubstantial guarantee; that is to say, the sums I periodically disburse are amply secured to me by the value of the operations performed. It is on the face of it—if you will permit me to say so—an utterly anomalous conjunction of eventualities which gives me no such security against my architect, to whom I am requested to disburse—by clear demonstration—not 80 per cent. of, but *more than double*, the proportion of fees represented by the work accomplished.

I observe that the certificate, which you inform me has been transmitted to Mr. Grigblay, is for the augmented amount of £3,000. May I be permitted to remind you that £2,000 is the payment I am accustomed to anticipate disbursing on these occasions.

Yours sincerely,

Brash's protest is not unnatural, and his reasoning would be sound if his premises were true. This is a very different letter from those he wrote to his young friend in the early days; in fact, it is such a letter as he might write to one of his own years and standing. Spinlove's firm resistance to being bilked seems to have jolted Brash into a higher esteem of him. His wordy expostulation is a little pathetic.

GRIGBLAY TO SPINLOVE

Dear Sir, 12/8/25

We are unable to agree that the error in back staircase is a matter for which we are in any way accountable, as we had no means of knowing what your intentions *re* bathroom door were. We must ask you to note this, as we cannot accept any such responsibilities for oversights in joinery details, although we do our best to detect them. As the alteration now required is a small matter we will, however, in this instance make no charge, although we are entitled to do so.

Yours faithfully,

I judge this letter to have been dictated by Grigblay himself. He has no doubt had a sharp word to say to his shop foreman and to Bloggs, but as a matter of principle he finds it necessary to remind Spinlove that his bland assumption that the architect is not responsible for misdirections, and for discrepancies in his own thoughts, will not do at all.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 13/8/25

Had I known you were not aware of the custom concerning payment of architects' fees I would have explained the matter. I now enclose particulars of 'architects' charges issued by the Royal Institute, from which you will see that two-thirds of the 6 per cent. fees—that is, 4 per cent. of the amount of the accepted tender—represents fees earned before the contract is signed. The remaining 2 per cent. is for general supervision and direction of the work, and is payable in instalments as the works proceed; so that the architect is in the same position as the builder in giving what you term "financial security." At no time is the architect paid for what he has not done.

I shall be glad if you can make it convenient to send me a cheque. One has, of course, to get in one's money.

Grigblay is entitled to £3,000. He would have been entitled to £2,000 several weeks ago had he applied for it. The contract states that certificates shall be for not *less* than £2,000.

With kind regards,

Yours sincerely,

Spinlove seems now to have got Brash's measure in this matter of fees. He has knowledge, of course; but the letters also show him to be the stronger man. By comparison Brash appears to be—if I may be given permission to be allowed to so express myself—a flabby old jelly.

SPINLOVE TO GRIGBLAY

Dear Sirs, 15/8/29

I was on the site yesterday and was disturbed to see water standing 15 ins. deep in cellar. Some months ago I noticed water, but supposed it was due to rain, only. There is no sign of its coming in through the walls above the standing level of the water, so that there must be a defect in the vertical dampcourse below that line. Your foreman says he pumped the cellar dry a fortnight ago, when there was nearly 2 ft. of water. I directed him to dig down outside and open up vertical dampcourse for my inspection. Please let me know directly the work is ready for me to see.

Yours faithfully,

GRIGBLAY TO SPINLOVE

Dear Sir, 16/8/25

Our foreman has reported to us your instructions to open up vertical dampcourse; but this is a big undertaking and, as we are certain there is no defect in the dampcourse, we do not think any purpose will be served by opening up. We have directed our foreman to pump the cellar dry, and we will keep it under observation. In our opinion the water comes up through the floor.

Yours faithfully,

SPINLOVE TO WILLIAM WYCHETE, P.P.R.I.B.A.

Dear Mr. Wychete, 18/8/25

I am in difficulties with a cellar which lets in water; but where it comes from or how it gets in I cannot understand. The ground is perfectly dry; there was not a sign of water when the excavation was made, and the lower 7 ft. of excavation is in impervious clay. The vertical dampcourse of 1-in. thick waterproofed cement is continuous with the horizontal dampcourse which is below the level of the cellar floor. This is 4-in. concrete with 1½ ins. of 3 and 1 cement rendering trowelled to a polish, with skirting carried up 6 ins. and turned into joint of brickwork.

I went on site yesterday after the cellar had been pumped out and wiped dry. We could find no flaw anywhere, but after a time the whole surface of the floor became wet, and after a couple of hours water had collected in one part. The foreman says the floor is "sweating," but does not explain what he means, and I don't think he knows. Can you give me any idea of what is wrong, and how I can make the place tight?

Yours sincerely,

WYCHETE TO SPINLOVE

My dear Spinlove, 20/8/25

I think the explanation of your scrape is that the impervious excavation holds surface water, which collects against the outside of the walls, like a tank. This gets under the foundations and through the footings, and floods the space under the floor—which, I assume, has 4-in. or 6-in. of loose filling—and the water is forced up by its standing head through the concrete. The probability is that this process began while the concrete and rendering were green, so that minute channels were then formed in it; but under the conditions stated the cellar could scarcely be a dry one, as the floor was not damp-proofed.

If there is such a fall in the ground that you can drain the water away by connecting a pipe through the wall into the hard core under the floor, the cure is easy. If not, your only course, in my opinion, is to cover the

floor with asphalt and put a concrete floor on top, to prevent the water forcing the asphalt up. This concrete, however, may not be necessary. It is important to dig a sump and keep the water pumped out until the whole of the floor is finished and perfectly set. The builder should have done this originally.

With best wishes to you,
Ever yours sincerely,

SPINLOVE TO WYCHETE

Dear Mr. Wychete, 21/8/25

Many thanks for your letter. I understand the matter perfectly now. There is a sharp fall in the ground, so that there will be no difficulty in draining. Can I make the builder pay for this work? Also, would the District Surveyor be likely to object to the drain going under the walls? If so, perhaps it would be best to put an iron pipe through the wall and under the house, but the rest of the drain, I imagine, could be earthenware? Or could the whole be earthenware if care were taken to carry walls, etc., clear of it?

Yours very sincerely,

Gabble, gabble! Spinlove is here so elated to find himself master of the awkward situation that he loses his head and acknowledges Wychete's careful reply to his question by asking him a hatful of entirely idiotic and unanswerable ones. Needless to say, there is no reply from the great man.

LADY BRASH TO SPINLOVE

Dear Mr. Spinlove, 21/8/25

Sir Leslie is so *dreadfully* sorry not to be able to have answered your last letter, but he has gone to The Moor quite suddenly!! He did not in the least expect it, and asked me to write and tell you.

My daughter is expecting some young friends on Saturday, and we shall hope to see you in the afternoon.

How very close it has been today!

Yours sincerely,
MAUDE BRASH.

Will you be my D.P. to Bingham's and stay night? Biff has let me down. *Split-tail behaviours.* Phone early. P.

For "The Moor," I read the moors: Brash has been invited north to shoot grouse. I do not know how Lady Brash manages to convey that her husband is a most unsafe gun, but she certainly does so.

As it is eight days since Spinlove wrote, this stampede to "The Moor" is an imperfect explanation of his getting no answer. The intimation that he lies heavy on his client's conscience will, no doubt, hearten him.

It was "P," by evidence of the handwriting, who wrote a footnote to an earlier letter! "P" must be the daughter.

(NEXT WEEK: LADY BRASH TAKES CONTROL)

[NOTE.—In the last number, for "52 ft." head of water in drains under test, read "32 ft."]

THE HOUSE OF WILLIAM BRUCE: III

An Architect's Home And Its Influence on English Architecture

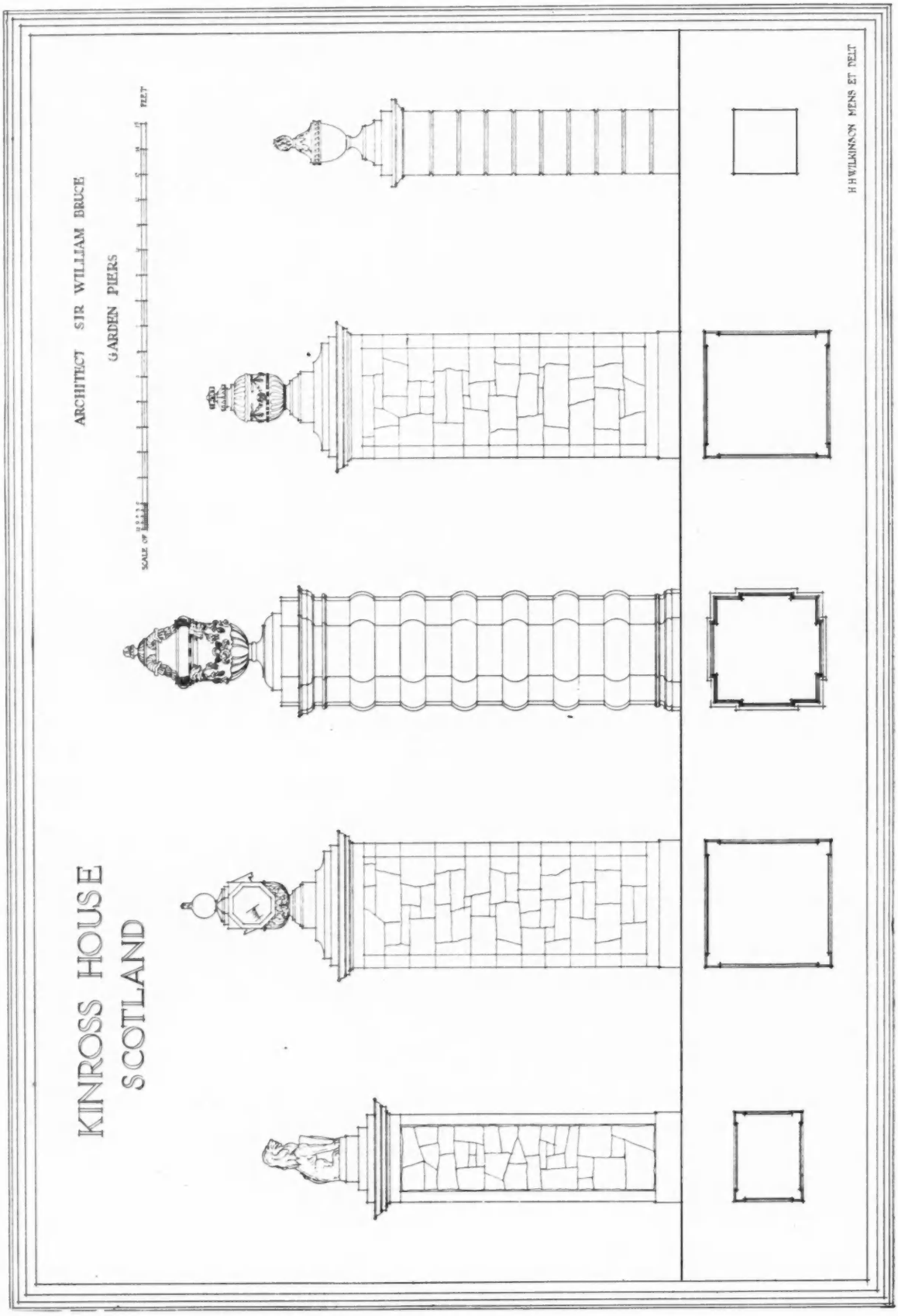
On pages 464 to 467 are reproduced further measured drawings and photographs of Kinross House. This series, which will comprise every detail of a house of outstanding architectural interest, began in our issue for September 11.

THE supreme quality of Kinross House is, as has been hinted, the magnificent completeness of its realization. Writing in the year of Bruce's death, Sir Robert Sibbald, the great physician and historian of Bruce's county of Kinross, says that "for situation, contrivance, prospects, avenues, courts, gardens, gravel walks and terraces, and of hortulane ornaments, parks and planting" it is surpassed by few houses in the country. When Bruce bought the Kinross estate from the Earl of Morton in 1675 the level of the water in Loch Leven was 5 ft. higher than it is today, and the site of the house was a vast morass. This Bruce began by reclaiming. The "situation" which Sibbald puts first in his commendatory list was worth the price paid to make it inhabitable. The axis of the house and grounds runs clear through the centre of the ruined castle, famous as the prison that held Mary Queen of Scots in 1567-68, which still stands on the island in the Loch. As you look from the garden porch down the terraces and over the top of the Fish Gate by the water's edge, the island with its square tower rising from the trees might almost be one of those made-to-order ruins without which, a century later, few great houses were considered complete. Bruce's name has still to be mentioned among those of the Romantic school in art and thought, and yet it cannot be doubted that he and not Vanbrugh was the first to regard with the painter's eye a decrepit building nestled in its landscape. The author of the newest exposition of *The Picturesque* tells how he was drawn to study the subject of his book by looking out from the window of a house built in 1837 upon "a castle, partly ruined, on an island in a lake." But here we have more than a window: we have a whole house looking out upon just such a castle and such an island. It was not till long after the building of Kinross—not, indeed, till the rise of the Adam brothers—that the importance of a view became generally recognized in architecture.

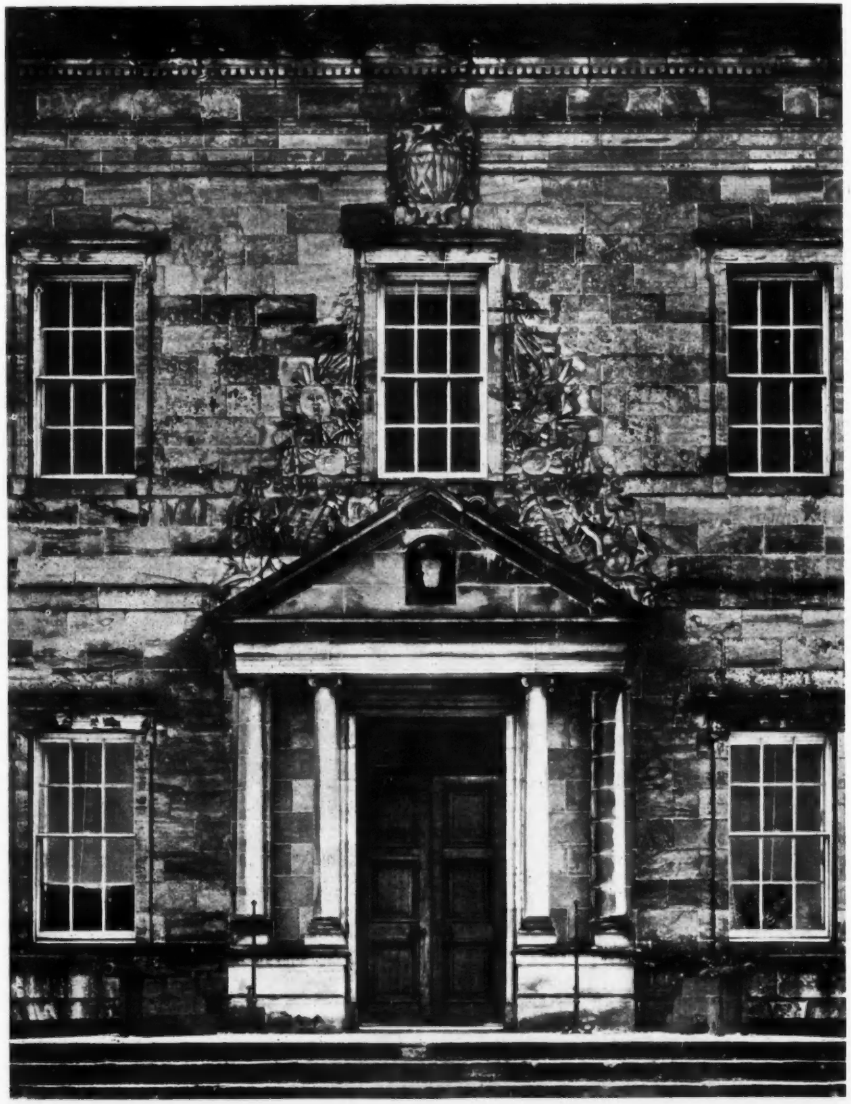
Our great good fortune in possessing an architect of Bruce's genius who at the same time could afford to build himself a country seat shows itself already in the selection of the site. Had he been building for another he would scarcely have begun with a marsh and a view; and spent ten years draining the one so that his house might stand in proper relation to the other. But the virtues of Kinross do not end there. As with its situation so with everything else about the place; no work of the mid-eighteenth century comes so near to the spirit of the Adams and their compeers as this building, then two generations old. The wings are the wings of Stoke Park, maintained in their original brevity. Anyone with the plan of Kinross House before him might almost have been able to predict that the far-flung side buildings of Buckingham House and Vanbrugh's palaces would have their day. But the main block is indisputably the child of Coleshill—and yet how subtly different from that exquisite repository of all the virtues of the mid-eighteenth century in England! The plan is almost a repetition of Coleshill, the shifting aside of the staircase from its central position being the only conspicuous variation. But if we regard the exterior of the building we shall see several important departures which justify the claims here made for Bruce's house. [Further measured drawings and photographs will be published next week.]

Archibald Dawnay Scholarships

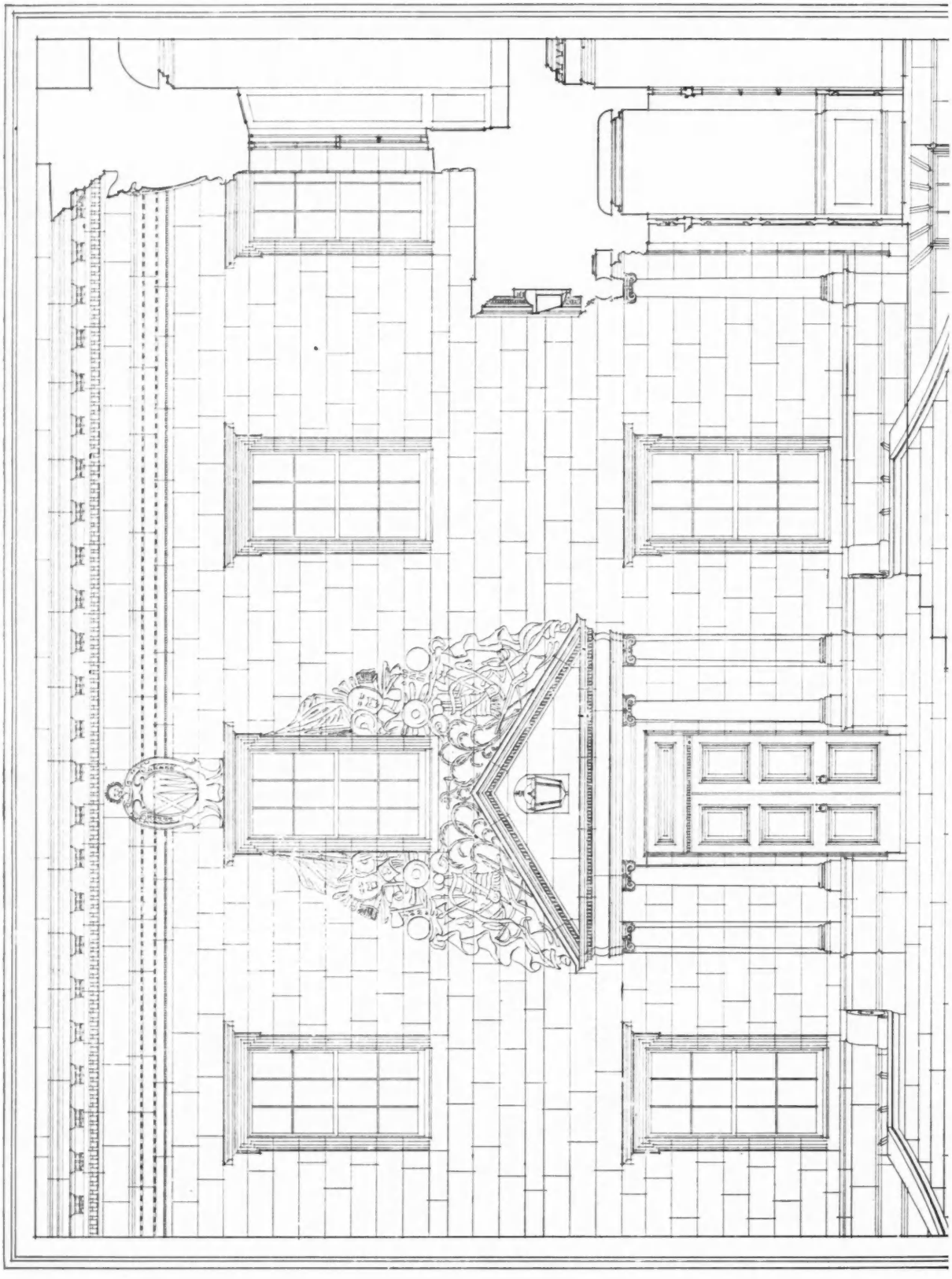
In accordance with the terms of the will of the late Sir Archibald Dawnay, the R.I.B.A. have awarded one scholarship of £75 for the academical year 1929–30 to Mr. F. J. M. Ormrod, of the School of Architecture, University of Liverpool, and one scholarship of £50 for the academical year 1929–30 to Mr. J. P. Ward, of the Welsh School of Architecture, Cardiff. Mr. L. A. Chackett, of the Birmingham School of Architecture, who was awarded a scholarship of £75 for the academical year 1928–29, and Mr. John Hughes, of the School of Architecture, University of Liverpool, who was awarded a scholarship of £50 for the academical year 1928–29, have been granted renewals of their scholarships for the year 1929–30.

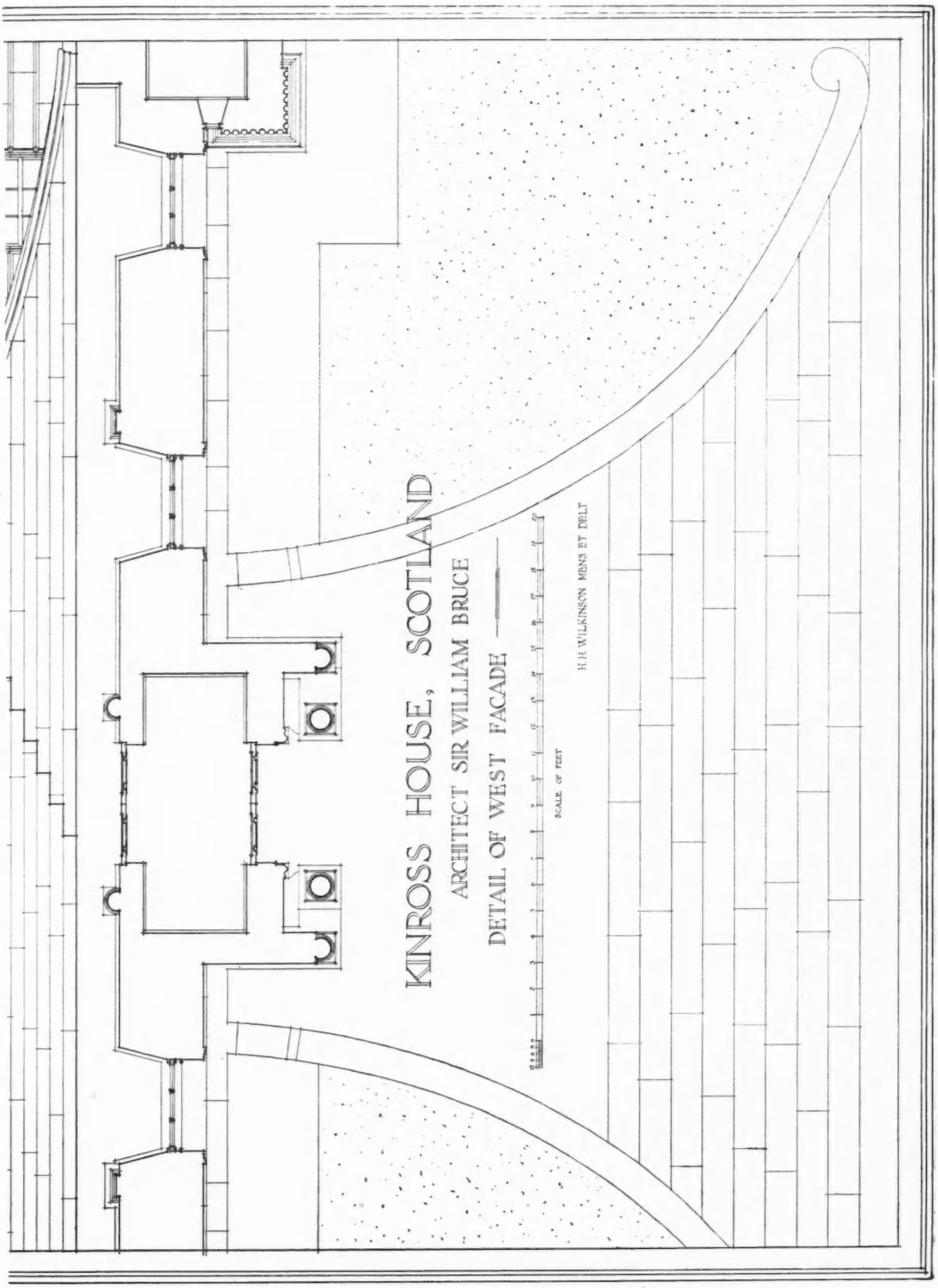

KINROSS HOUSE
SCOTLAND
ARCHITECT SIR WILLIAM BRUCE
GARDEN PIERS
SCALE OF FEET
H.H.WILKINSON MENS ET DELT

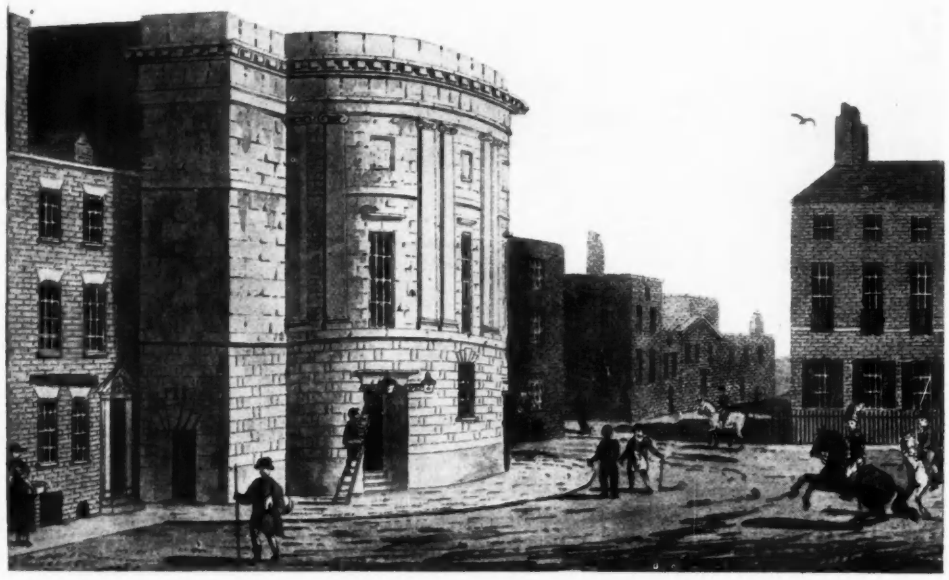




Kinross House was designed by Sir William Bruce, the great Scottish architect, and built for the family seat. It was in process of erection from 1685 to 1690. Measured drawings of the garden piers and of the entrance door on the west facade, photographs of which are shown above, appear on pages 464, 466, and 467.




KINROSS HOUSE, SCOTLAND
ARCHITECT SIR WILLIAM BRUCE
DETAIL OF WEST FACADE
SCALE OF FEET
H. H. WILKINSON MENS ET DELT



The Theatre Royal, Liverpool. (Print published December 1, 1804.) Built in 1800, the façade of this building is of highly Ionic pretensions, with the segmental portion expressing the elliptical foyer on the ground floor.

PRINTS OF CENTURY

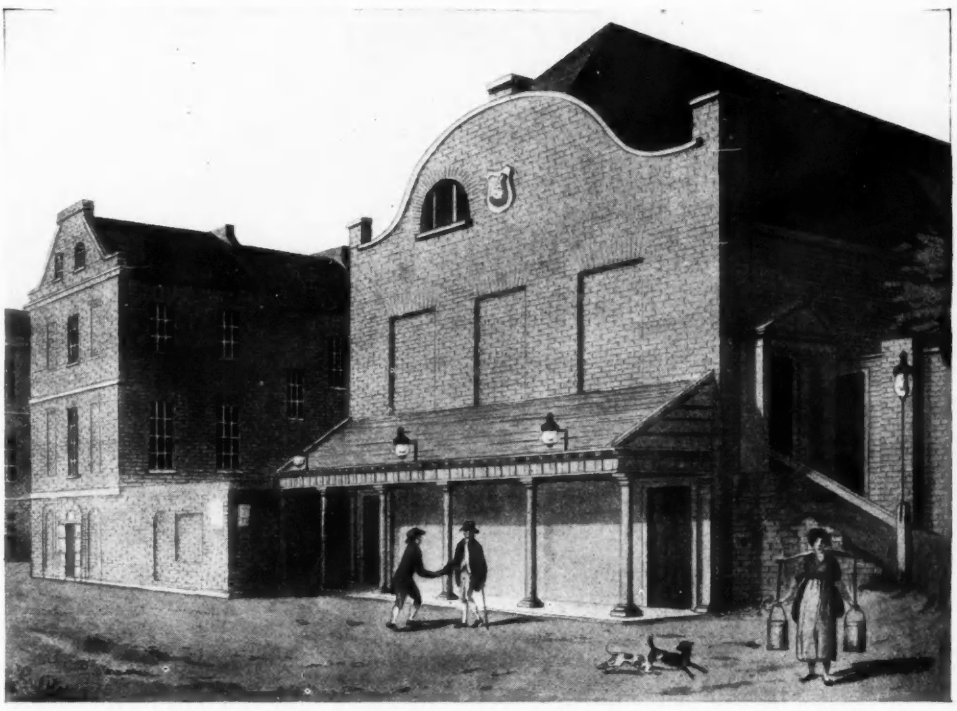
WITH
BY PROFESSOR

THE IMPORTANCE OF LIVERPOOL AS A PORT OF DEPARTURE FOR AMERICA IN THE LATE EIGHTEENTH CENTURY MADE IT ESSENTIAL THAT A FAIRLY LARGE THEATRE SHOULD BE ESTABLISHED. THE PRINT, REPRODUCED ABOVE, SHOWS AN INTERESTING FAÇADE OF HIGHLY IONIC PRETENSIONS. THE SEGMENTAL PORTION EXPRESSES THE ELLIPTICAL FOYER ON THE GROUND FLOOR. THE STAIRCASES WERE COMBINED WITHIN THE BALANCING PYLONS. AT LIVERPOOL ALL THE LONDON STARS PLAYED, AND FOR MANY YEARS THIS THEATRE WAS FAMOUS AS BEING ONE OF THE LARGEST HOUSES IN THE PROVINCES. THE SMALL THEATRE AT PORTSMOUTH WAS THE CHIEF ATTRACTION FOR THE NAVAL ELEMENT. UNDER ITS ROOF TRAVELLING COMPANIES PLAYED THE LATEST SUCCESSES FROM DRURY LANE TO MEN ENGAGED IN THE LONG STRUGGLE AGAINST NAPOLEON. HERE THE SONGS WRITTEN BY CHARLES DIBDIN WERE HEARD WITH ENTHUSIASM. JANE AUSTEN KNEW THE PLACE, AND CAPTAIN MARRYAT PAID THE MODEST PRICE FOR A SEAT IN THE PIT WHEN HE WAS A MIDSHIPMAN.



The Old Theatre Royal, Portsmouth. (Print published November 17, 1803.) Erected in 1802, this theatre was chosen by Charles Dickens as the scene for the debut of Nicholas Nickleby. The site is now covered by barracks.

The Theatre, Exeter. (Print published May 1, 1804.) The illustration shows a façade of uncompromising piquancy, with the roof terminated with a curvilinear gable marked at the extremities by piers.



18th & 19th THEATRES

COMMENTS
A. E. RICHARDSON

IN THE WEST OF ENGLAND, AT THE BEGINNING OF THE NINETEENTH CENTURY, THE THEATRES AT EXETER, PLYMOUTH, AND TRURO FORMED A GROUP BY THEMSELVES. THOSE AT EXETER AND PLYMOUTH HAVE LONG SINCE BEEN DEMOLISHED, BUT THE HOUSE AT TRURO STILL STANDS. THE PORTICO OF THE THEATRE AT EXETER IS NOTHING MORE THAN A LEAN-TO CARRIED UPON A PROVINCIAL TURN OF THE DORIC ORDER. REGARDING THE ENTRANCE TO THE GALLERY THE DESIGNER EVIDENTLY PLAYED FOR SAFETY. HERE IS A DESIGN WHICH, FOR SIMPLE STATEMENT, IS AN OBJECT LESSON. HOW WE DESIRE THAT THE MODERN CINEMA SHOULD BE AS WELL EXPRESSED. TUNBRIDGE WELLS BEGAN TO ATTRACT STROLLING PLAYERS AS EARLY AS THE YEAR 1737. IN 1753 A ROOM IN A PUBLIC-HOUSE WAS USED BY THE PLAYERS. IN 1770 A " TEMPLE OF THE MUSES " WAS BUILT ON MOUNT SION BY A MRS. BAKER. THEN THE PLAYHOUSE WAS TRANSFERRED TO A WAREHOUSE IN CASTLE STREET. LATER ON, THE ORIGINAL THEATRE ON MOUNT SION WAS PULLED DOWN AND A NEW ONE BUILT, PARTLY WITH THE OLD MATERIALS, ON THE SITE NEXT TO THE SUSSEX TAVERN.

The Old Theatre, Tunbridge Wells. (Print published April 1, 1804.) In 1801 it was decided to build an entirely new house at Tunbridge Wells, and the illustration shows the building erected in 1802 at a cost of £16,000.



LAW REPORTS

NECESSITY TO SEWER A ROAD : POINT OF CONSTRUCTION

Wallrock v. *Clare and Clare* v. *Wallrock. House of Lords. Before Lords Buckmaster, Dunedin, Sumner, Blanesburgh and Warrington*

These were two appeals from decisions of the Court of Appeal, High Court of Justice, the cases having been originally tried in the Chancery Division. In the first case, *Wallrock* v. *Clare*, the point at issue was whether, under a certain conveyance of land, with a frontage to Old Church Lane, Stanmore, Middlesex, the appellant was entitled at the date of the issue of the writ in the action to a right of way over a piece of land described as the proposed new road to be constructed and made by the vendor, notwithstanding that it had not then been constructed or made, or whether the appellant's rights only dated from the construction and making of the proposed new road.

Mr. Justice Clauson, who tried the action in the Chancery Division, took the view that the appellant was entitled to the right of way from the date of the issue of the writ, whilst the Court of Appeal decided that appellant's rights only commenced from the time the road was constructed and made.

Their lordships upheld the decision of the Court of Appeal.

In the second case the point was whether, as held by the Court of Appeal, the appellant had, by his failure to sewer throughout its entire length the road referred to in a conveyance dated August 20, 1926, as "the proposed new road to be constructed and made by the vendor," committed a breach of the covenant by him in the conveyance "if necessary to sewer the same."

Mr. Justice Astbury, who tried the action, held that the appellant had not by such failure committed a breach of the covenant.

For the vendor, the appellant, it was contended that it was never "necessary" to sewer the whole of the road.

Their lordships held that the Court of Appeal was wrong, and reversed that decision and restored the judgment of Mr. Justice Astbury.

Lord Sumner dissented from this decision.

COVENANT OF A LEASE

Hill v. *Booth. King's Bench Division. Before Mr. Justice Acton*

In this action Mr. R. N. Hill, of Ormesby, Suffolk, sued Mr. R. E. Booth to recover £800, being the balance of a premium alleged to be due under a covenant contained in the lease of the Coliseum Theatre and Assembly Rooms, Gorleston-on-Sea, granted to the defendant.

It appeared that plaintiff, in 1926, granted to the defendant a 22-years' lease, a £1,000 premium being payable under it. £200 was paid, and the balance was to be paid by instalments. It was said that plaintiff mortgaged the Coliseum to Barclays Bank in order to secure an overdraft. The bank under the mortgage held the power of attorney, and were entitled to sell the property without notifying Mr. Hill. Acting under that power, the bank sold the Coliseum to Mr. Booth for £8,350. Under the lease granted by Mr. Hill to Mr. Booth, Mr. Booth had an option to purchase the Coliseum for £13,000. The defence was a general denial that the money was owing. Mr. Booth, said Mr. Cave, contended that he bought the property from Barclays Bank, and that the deed of conveyance determined the lease he held from Mr. Hill. By way of counter-claim, Mr. Booth claimed a declaration that the lease was annulled after October 12, 1926. In answer to the counter-claim, Mr. Hill contended that the lease was in force, and that the £800 balance of the premium was owing.

His lordship gave judgment for plaintiff for the amount claimed, with costs. He said that the deed of conveyance of October, 1926, was silent about the premium which was provided for in the lease of 1926. In his view the lease, when it referred to a premium, meant something entirely different from rent. It was a sum to be given for the privilege of obtaining the lease on certain terms. That the arrangement with regard to the premium ceased in a few months to be of benefit to Mr. Booth was due entirely to his own voluntary act in acquiring from the bank the freehold of the premises.

LAW OF PROPERTY ACT : DISPUTED RIGHT OF WAY

Clark v. *Barnes. Chancery Division. Before Mr. Justice Luxmoore*

In this case the plaintiff, Major William H. Clark, of West Chiltington, Sussex, disputed the defendant's right of way over land, belonging to plaintiff, adjoining the land which the defendant had bought from the plaintiff. Defendant, Mr. Walter Barnes, purchased two parcels of land from the plaintiff for £250 in September, 1925, and he claimed that by virtue of the conveyance he was entitled to the right of way alleged, and further said that he had used the track openly for eighteen months in order to reach the highway, and there had been no objection or interference. Plaintiff claimed a declaration that defendant was not entitled to use the way, and in the alternative he sought a rectification of the conveyance.

His lordship, in giving judgment, said the contract did not include any express agreement to grant a right of way, and consequently the contract only purported to pass such easements as were legally dependent or appertaining to the land. Under section 62 of the

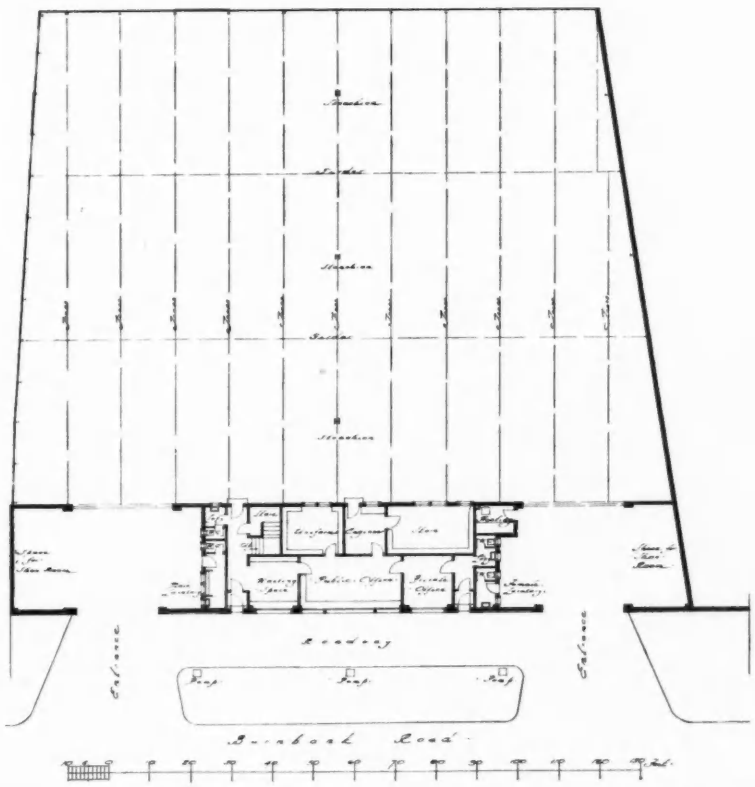


Omnibus station, Hamilton, Scotland. Designed by Alex Cullen. A frontage of approximately 180 feet to the main street was available. The façade was treated as a whole, the two side wings, containing the entrances, abutting on a central office. The building line has been set back a few feet so as to provide space for a roadway, which enables buses to be drawn off the main street while refilling.

Law of Property Act, 1925, it was provided that a conveyance of land shall be deemed to include all ways, liberties, privileges, easements, rights and advantages appertaining or reputed to appertain to the land or any part thereof at the time of the conveyance. That provision was to apply only if a contrary intention was not expressed in the conveyance. The conveyance as executed did not exclude the operation of that section of the Law of Property Act, and the conveyance therefore operated to grant to the purchaser the legal easement which was reputed to exist and which was, in fact, being enjoyed with the property conveyed. His lordship held that the right to use the track was reputed to be enjoyed when the land was bought by Mr. Barnes. There was therefore conferred on the defendant the right to use the track for the purpose of getting access to and from the highway. Plaintiff therefore failed with regard to the declaration he sought. But a second question was raised in the action, and that was whether plaintiff was entitled to a rectification of the conveyance on the ground that there had been a mutual mistake between the parties so as to prevent the grant of the right of way by implication. In his lordship's view plaintiff was entitled to have the conveyance rectified. Neither party thought such a right was to be granted. There was a conflict of evidence as to what happened when the agreement was entered into. Defendant stated that no one said anything about the right of way, but Major Clark was positive that he stated there would be no right of way over this track. His lordship accepted plaintiff's story that the question of the right of way was discussed, and that it was agreed that there should be no right of way. The conveyance would therefore be rectified by the insertion of words precluding the right of way defendant claimed. Defendant would pay the costs of the action.



Omnibus station, Hamilton. Designed by Alex Cullen. The base and bands are black, and contrast pleasantly with the cream-tinted main walls. The facia letters are in a deep red enamel. Metal casement windows are fitted.



Omnibus station, Hamilton. Designed by Alex Cullen. The building houses the fleet of buses (owned by a private company), which plies on the very busy Glasgow-Hamilton route. Accommodation has been provided for fifty of the largest and most modern vehicles, and additional ground has been reserved for future extensions.

TOWN AND REGIONAL PLANNING

A paper on "Town and Regional Planning" was given at the conference of the Royal Sanitary Institute of Scotland, by Mr. George D. Macniven, F.R.I.B.A.

Town planning, he said, was essentially a business proposition whereby we could apply for the general needs and in the general interest that measure of intelligent foresight which any person of thought applied to his own affairs.

We could not prevent, he said, and we did not wish to prevent, the continuous invasion of hitherto secluded spots by the thousands of city dwellers in search of rest and recreation; but surely it was our duty to do what we could to prevent the true beauty and charm of our countryside being destroyed by the very process which made its benefits so easily and so readily available to us all.

D

A TWELFTH-CENTURY MOUNTAIN CHURCH

The accompanying illustration, reproduced from the one hundred and eleventh annual report of the Incorporated Church Building Society, shows the interior of Llanrhychwyn, one of a large number of churches the repair of which the Society has assisted during the past year. Llanrhychwyn is a mountain church, situated above Trefriw, on the Carnarvonshire side of the River Conway. The church at Trefriw, we are informed, was built by Llewelyn ap Iorwerth, "for the ease of his princess, who before was obliged to go on foot to Llanrhychwyn." This simple country church has little architectural pretension, but is of much interest as an example of local methods of planning and workmanship, and the manner in which it sets in, and completely harmonizes with, its natural mountain surroundings. We have an original church of the small parallelogram type developing, by successive enlargements, into a double-naved building. The oldest work is the walling of the west end and the south wall of the south nave, extending eastward as far as the sanctuary. The only feature here is the narrow south doorway, 2 ft. 11 ins. wide, with its slightly segmental head worked in local stone. It is difficult to assign a date to this simple doorway. The opening may possibly date from the twelfth century, though, it is thought, the arch has been reset.

Among the many features of interest in the church is the eastern window. This is small, of two lights, with trefoiled heads of fifteenth-century workmanship, possibly inserted to receive the glass, of which some valuable pieces still remain. The only windows in the south wall are two square-headed lights—that in the nave dated 1737 on the lintel, that in the sanctuary possibly a little earlier.

In the sixteenth century a northern nave was added. It has a doorway in the centre of the north wall—now converted into a window—and is lighted by two other windows, one in the wall to the east of the doorway, the other, a single wide light with a low arched-head, at the east end. The character of the windows and of the slate-rock of the walling is of the same type as that at Dolwyddelan Church, built by Meredydd ab Ieuan in 1512. The work at Llanrhychwyn, dating probably later than that at Dolwyddelan, has either been carried out by Meredydd ab Ieuan, or has been influenced by his work. The outer slopes of the roofs of the church are still covered with fine old graduated slating of thick slates. Of church fittings, the most important is the old square font, 1 ft. 8 ins. high, 1 ft. 9 ins. square at the top, diminishing in size downwards and standing on two steps against the western pillar. It may date from the twelfth century. The altar-rails, enclosing a small square space around the altar, are dated 1636. The pulpit in the north nave is dated 1691. There are several simple seats and benches of interest which give an old-world charm to the building.

In 1928 the Society made grants to 86 churches in various dioceses in England and Wales. Of these, 10 were made from the Mission Buildings Fund. In 1927 the number of grants made was 72, so that it will be seen that there is no diminution in the Society's usefulness in being able to accord real help to many parishes at times of special need. Since the formation of the Society in 1818 some £1,162,780 has been raised and expended in giving 10,362 grants from its General Fund. In addition, £32,225 has also been contributed to 1,048 mission churches.



Llanrhychwyn, a mountain church situated above Trefriw, on the Carnarvon side of the River Conway. It dates, it is thought, from the twelfth century and is now being repaired with the assistance of the Incorporated Church Building Society.

READER'S QUERY

DAMP IN CHIMNEY-BREAST

B. M. writes: "For some months past disfiguring patches have been appearing on the inside plastered face of a chimney-breast. Damp was certainly present in the first instance, and a cowl placed on the pot has effectively prevented any further moisture from penetrating the flue. Further marks continue to appear, however, and the vehicle now seems to be oil. The flue serves a copper where in previous days greasy rubbish was habitually burned. Naturally I do not wish to disturb the inside of the flue if it can be obviated, as any rebuilt portion could not be properly rendered. Assuming that there is still a considerable quantity of greasy soot permeating the brick, is there any brand of lime or cement plaster which is definitely grease proof?"

It is perhaps too optimistic to assume that a cowl placed above a chimneypot has effectively prevented any further moisture from penetrating the flue. Generally speaking, driving rain will penetrate the thin brickwork of a stack, and will soak the part of it that is between the uppermost ceiling and the underside of the roof. A more than usually porous stack or an abnormally low loft may then cause the damp to appear within the top-floor rooms with any discoloration it may bring with it from the sooty flue. A dampcourse near the junction of stack and roof will do something to mitigate this soakage, but the selection of impervious materials for the construction and lining of the stack is also important. The dampcourse must be above the roof slope.

Country builders advise the use of an undercoat of parging, or pargeting, made of three parts of cow-dung to one of lime, as an effectual bar to soot stains. Probably an undercoat of Portland cement and washed sand in the proportion of two parts cement to one part of sand would be equally effective. If a waterproofer is used with

the cement it is necessary to choose one that will not be affected by heat or make a greasy film on the surface and prevent the adhesion of the succeeding coats of plaster.

The impermeability, or otherwise, of any brand of cement is largely a question of handling.

A neat cement often shrinks and becomes covered with hair cracks on setting, particularly if over-trowelled. The best results are often obtained by mixing the cement and sand with sufficient water to make it adhere to the wall in a thin skin when thrown on with a minimum of trowelling. The required thickness is built up by the use of successive coats. Trowelling the surface of a coat of rendering after it has partially set is another way of pushing together the incipient cracks and making it less porous, but it is probably rather less effective than the application of several thin coats. Each bricklayer or plasterer has his own method, however, and if he is a trustworthy man knows how to produce good results by it.

W. H.

COMPETITION CALENDAR

November 8. The Somerset Rural Community Council, in conjunction with the R.I.B.A., invite architects and architectural assistants resident in Somerset to submit designs for Country Garages and Petrol Filling Stations. Assessor: Mr. Harold E. Todd, A.R.I.B.A. Prizes: The "Sir Charles Wakefield" prize, £10 10s. and silver cup presented by the Somerset Automobile Association. Further prizes of £7 7s., £5 5s. and £3 3s. and two cups presented by the S.A.A. Particulars from the Secretary, Somerset Rural Community Council, 42 Bridge Street, Taunton. Deposit 10s. 6d.

November 30. The Hull Corporation invite architects to submit schemes in competition for the facades of the New Street from Paragon Station to Beverley Road, Hull, and openings to adjoining streets. Assessor: Sir Reginald Blomfield, R.A., P.P.R.I.B.A. Premiums: £750, £350 and £150. Applications for conditions of the competition, etc., should be made to Mr. J. R. Howard Roberts, Town Clerk, Guildhall, Hull. Deposit £1 1s. Latest date for sending in designs: November 30.

December 7. The Provost, Magistrates, and Councillors of Dumfries invite architects practising in Great Britain to submit competitive designs for the Town Hall and Municipal Offices, which it is proposed to erect on the site of the old Town Hall and of the Municipal Offices, Dumfries. Assessor: Sir George Washington Browne, P.R.S.A. Premiums: £300, £200, and £100. Application for conditions of competition, etc., should be made to Mr. R. A. Grierson, Town Clerk, Town Hall, Dumfries. Deposit £2 2s. Latest date for sending in designs: December 7.

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to Mr. H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

TRADE NOTES

Interesting Joinery.

Messrs. Arnold and Sons, Ltd., shopfitters, of Northampton, London, and Birmingham, are carrying out some interesting joinery work at the Norwich branch of Barclays Bank, Ltd. The work is being carried out under the supervision of the architects, Messrs. Brierley and Rutherford, of York, and Messrs. E. Boardman and Sons, of Norwich. It comprises cashiers' counters, with cashiers' desks on top, the chief clerk's desk, clerks' desks behind the counters, telephone boxes, and a large number of screens to divide up the bank into compartments. All this work is in Cuban mahogany. The main counters are finished in front with heavy carved consols, and have panels of quartered fiddle-back type Cuban mahogany, and teak counter tops. At the back the counters are divided into cupboard and drawers in the usual way.

A New Sales Company.

A new sales company, styled Asbestos Cement Building Products, Ltd., has been established, to include in its scope the entire sales activities of Turner Brothers Asbestos Co., Ltd.; Bell's Poilite and Everite Co., Ltd.; and British Fibrocement Works, Ltd., so that, as from October 1, 1929, the sale of all asbestos-cement building products will be conducted in the name of Asbestos Cement Building Products, Ltd. This new company will have its headquarters at Manchester, with branch offices in London, Birmingham, Newcastle-on-Tyne, and Glasgow. Organized to handle the ever-increasing demand for British-made asbestos-cement goods, and associated with companies operating sixteen works covering more than 400 acres, seven asbestos mines, and employing over 7,500 people, Asbestos Cement Building Products, Ltd., will, it is claimed, be in a position to render service of a magnitude and character unequalled the world over.

CONWAY HALL

Following are the names of the specialists, general contractors, and some of the subcontractors for Conway Hall, Holborn, illustrated on pages 455-8. Quantity surveyor, Mr. T. Moody; wood carvings and plaster modelled panels, Mr. and Mrs. Stuttig. General contractor: John Greenwood. Sub-contractors: B. Goodman and Co., excavation; Ragusa Asphalte Paving Co., Ltd., asphalt; Edwards, Ruabon, silver-grey facings and Fletton bricks; Chambers and Norris, artificial stone; Cooper, Wettern and Co., granite; Redpath, Brown and Co., structural steel; Kleine Flooring Co., fireproof construction; J. A. King and Co., lay-lights; Haywards, Ltd., and Luxfer, Ltd., patent glazing; Zeta Wood Flooring Co., wood-block flooring; Carter and Co., Ltd., floor tiles and stair treads, Carterazzo walls and staircase; H. and H. Davies and Co., central heating and ventilation; Gas, Light and Coke Co., grates and gasfitting; National Radiator Co., boilers; Tyler and Freeman, electric wiring, bells and telephones; Dernier and Hamlyn, and Gillham and Jones, electric light fixtures; J. Evans and Co., plumbing; A. Emanuel and Sons, Ltd., sanitary fittings; Robert Adams, door furniture; Jas. Gibbons, window and door furniture, metalwork, casements, and cloakroom fittings; Bostwick Gate Co., folding gates; Merryweather and Sons, fire appliances; Light Steel Co., iron staircases and metalwork; May Construction Co., acoustic plaster; Geo. Rome and Co., plaster; Wm. Hitchins and Co., doors; Jn. Greenwood, oak linings to walls, doors, and oak work in library; Martin van Straaten, tiling; J. Avery and Co., textiles; North of England School Furnishing Co., seats in large hall; Tan-Sad Co., seats in small hall; Adrian Stokes and Co., signs.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

26696. Adkinson, J. E., and Cartledge, H., and Leach, J. Dampcourses, etc. September 3.

27289. Callebaut, L. E. Concrete floors, etc. September 7.

26798. Clay, A. S., and Cooke, Troughton and Simms, Ltd. Orientator or architects' solar dial. September 3.

26919. Durastic Bituminous Paint Co., Ltd., and Thompson, W. B. Flooring. September 4.

26591. Edwards, H. G., and Udney & Co., Ltd., E. Device for laying mosaic floors, etc. September 2.

SPECIFICATIONS PUBLISHED

318338. Marshall, A. C., and Priest, A. S. Couplings or clamps for scaffolding or other purposes.

318347. Marshall, A. C., and Priest, A. S. Clamp for scaffolding for building and other purposes.

318387. Wolfsholz, A., and Barr, J. F. Process for sinking tubular bodies into the soil.

ABSTRACT PUBLISHED

316040. Aldam, E. H., London. Sliding doors.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

Messrs. A. J. King, Ltd., are to erect a factory building upon the site of "The Grange," Church Street, STOKE NEWINGTON.

Messrs. Constantine and Vernon, architects, are to erect new buildings on the sites of 363-365 Euston Road, 41-42 Warren Street, and 37-39 Southampton Street, ST. PANCRAS.

Messrs. Watney, Combe, Reid & Co., Ltd., are to reconstruct the "Tally Ho" public house, at the junction of Fortess Road and Willow Walk, CAMDEN TOWN.

Plans passed by the BERMONDSEY B.C.: Extensions, Alaska Factory, Grange Road, for Messrs. C. W. Martin and Sons, Ltd.; extensions, glue factory, Grange Road and Dunlop Place, for Messrs. George Elkington and Son.

The old buildings at Nos. 24 and 25 King Street, Minories, STEPNEY, E., are being demolished. It is proposed to erect a warehouse on the site. The plans have been prepared by Mr. R. Kitching Ellison, A.R.I.B.A.

Plans passed by the ST. PANCRAS B.C.: Alterations and additions, 99 Camden Mews; building, 24-32 Cleveland Street, and 56 Tottenham Street; building, 363-365 Euston Road, and 37-39 Southampton Street; addition, rear of 141-145 Kentish Town Road.

The ISLINGTON B. C. Electricity Committee reports that it has been informed that the Central Electricity Board has acquired certain premises previously occupied by the London and North Eastern Railway Company and situated on the Company's land in close proximity to the Council's generating station. It is proposed to demolish the existing building and erect a new structure.

SOUTHERN COUNTIES

The SWANSCOMBE U.D.C. surveyor has prepared a rough plan for the erection of a further thirty houses on the housing site.

The SWANSCOMBE U.D.C. is to borrow £14,682 for the erection of thirty-four houses at Greenhithe.

Plans passed by the SWANSCOMBE U.D.C.: Alterations and additions, "White Hart," Greenhithe, for Messrs. Style and Winch, Ltd.; shop and office, Milton Road, for Messrs. H. L. and L. A Meadows.

Plans passed by the DOVER Corporation: Two houses, Old Park Road, for Mr. H. F. Caspall; fourteen houses, Elms Vale Road, for the East Kent Building Co.; additions, St. Martin's Church, Maxton, for Mr. W. M. Martin; alterations, 320 London Road, for Messrs. Hayward and Paramor, Ltd.

Plans passed by the NEWBURY Corporation: Office building, Pound Street, for Messrs. James Bros.; sub-station, Oxford Road, for the Urban Electric Supply Company; house, Enborne Road, for Mr. A. J. Chivers; house, Enborne Grove, for Mr. A. E. Rawlings; two houses, Craven Road, for the Empire Building and Trading Co.; house, off Boundary Road, Wash Common, for Mr. T. Chivers; alterations and additions 87, 88 and 89 Northbrook Street, for Mr. Dexter Robinson.

The EASTBOURNE Town Council has approved an amended scheme for the development of the Redoubt at a cost estimated at not less than between £28,000 and £30,000. If the alterations made in the scheme meet with the approval of the Compton estate, confirmation of the decision to go forward with the scheme will be asked for at the next meeting of the Council.

SOUTH-WESTERN COUNTIES

The Portland U.D.C. is negotiating for the acquisition of land at WESTON for a housing scheme.

The BRISTOL Corporation has now prepared a scheme for the clearance and redevelopment of the Dings area at a cost of £79,000.

The Weymouth Corporation and Portland U.D.C. have agreed upon a scheme for extensions at WEYMOUTH Grammar School at an estimated cost of £12,000.

A scheme for strengthening the Victoria and Windsor bridges as footways, and for constructing a new road bridge at a total estimated cost of £37,000, has been submitted by the BATH city engineer to the Surveying Committee of the Council.

Plans passed by the PAIGNTON U.D.C.: 2 houses, Upper Morin Road, for Mr. R. M. Ely; house, Warefield Road, for Messrs. Willcocks and Barnes; bungalow, Clennon Heights, for Mr. H. H. Brealy; 10 houses, Marldon Road, for Mr. A. G. Wyatt; 9 houses, St. Mary's Hill, for Mr. W. Mead; shop, Blatchcombe Lane, for Messrs. Peeke Bros.

Plans passed by the WEYMOUTH Corporation: Additions, Lansdowne Lodge, Lansdowne Square, for Mr. A. E. J. Prideaux; shop, St. Mary Street, for Messrs. Griffiths Bros.; shop and premises, Crescent Street, and Queen Street, for Messrs. Clarke and Cross; 2 houses, Weymouth Bay Avenue, for Mr. G. R. Taylor; house, Alexandra Road, for Mr. H. Uncles; 2 houses, St. George's Avenue, for Mr. S. Hitt; 2 houses, Southlands Road, for Mr. K. Openshaw; houses, Old Parish Road, for Mr. J. Green.

A special committee of the BRISTOL Corporation, appointed to consider the desirability of providing new or improved highways for the relief of traffic in the central portions of the city, reports that steps should be taken to provide the new highway from Stokes Croft to Victoria Street. The estimated cost is £350,000. The construction of the new road will result in the demolition of a large amount of undesirable property; at the same time, it is hoped that the Markets Committee will be able to secure a suitable site for new markets adjoining the new route. The acquisition of a large number of properties and the construction of works, including the bridge across the floating harbour, may require Parliamentary sanction, but these powers can be obtained at a later date when it is known whether the Ministry approves of the scheme.

MIDLAND COUNTIES

The WALSALL Corporation has decided to utilize two acres of land on the Ring Road for the erection of houses.

The WALSALL Corporation has prepared a scheme for bridge widening and reconstruction at a total cost of £13,000.

The Northamptonshire C.C. is preparing a scheme for the construction of a bridge over the level crossing at WELLINGBOROUGH.

The COVENTRY Corporation is to purchase Home Farm, near Baginton, at a cost of £12,850 in connection with the scheme for a civic aerodrome.

The COVENTRY Education Committee has decided to erect a new department at Stoke Council School, at an estimated cost of £17,675.

The TYNEMOUTH Board of Guardians has prepared a scheme for the conversion of Ayton House into a nurses' home at a cost of £6,000.

The SHEPSHED Council is to build 78 more houses, and a new road, to be called Cambridge Street, is to be developed between Leicester Road and Charnwood Road.

The COVENTRY Corporation recommends the acquisition of property from the governors of Bablake School in connection with the Cross Cheaping improvement scheme at the price of £70,000.

Plans passed by the WOODFORD U.D.C.: House, Monkhams Lane; house, Walpole Road; 16 houses, St. Barnabas Road; 12 houses and 15 garages, Woodville Road; 4 houses, Broadmead Road; 4 houses, Horn Lane.

The DROITWICH Town Council has decided to lay before the Ministry of Health a scheme for the erection of forty houses upon the Copland Estate, recently acquired from the New Droitwich Development Corporation. The approximate cost of the scheme, including the making of roads, is £20,000.

NORTHERN COUNTIES

The governors of the Henry Smith School, HARTLEPOOL, have prepared plans for extensions

The SUNDERLAND Education Committee is to establish at the Bede College buildings a central school for about 640 pupils.

The Durham City Council is to erect an elementary school for 720 children at WHINNEY HILL.

The Durham County Education Committee is considering the provision of improved school accommodation in the RAINTON district.

The Durham County Education Committee has decided to provide a new school at HURWORTH for 176 children.

The HULL Corporation has obtained sanction for a loan for the purchase of land for the provision of open-air baths.

The MALTON R.D.C. is to consider a scheme of water supply to twelve townships in the rural area at an estimated cost of £24,000.



House at Guildford. Designed by Thomas R. Clemence. The walls are faced with red hand-made bricks with dressings of flared headers and stretchers. The roof is covered with tiles.

The BLYTH Housing Committee is considering the acquisition of land occupied by the South Farm for the erection of further houses.

The foundation stone of LIVERPOOL'S new abattoir, which will cost about £670,000 and will cover 17½ acres of land, was laid last Wednesday.

The CHESTER-LE-STREET U.D.C. has decided to proceed with a sewage-disposal scheme, estimated to cost £29,000, subject to the approval of the Ministry of Health.

The Miners' Welfare Committee has granted £8,000 to the SWANSEA Education Committee towards the cost of the provision of a mining department at the Technical College.

Plans passed by the BLYTH Corporation: Additions, United Methodist Church, Arthur Street, for Messrs. J. Goulding and Son; alterations, Stanley Street, for Rev. A. L. Wright.

The BLYTH Corporation Water Committee has instructed the borough engineer to prepare plans, specifications, and estimates of the proposed reservoir, attendant's house and meter houses, etc.

The BLYTH Corporation has asked the borough engineer to prepare plans, specifications, and estimates for the extension of Arterial Road, including a bridge over the railway, the layout of the town hall site, and the diversion of the road at Furnace Bank.

Plans for the proposed new fire station at CARLISLE are to be sent to the Ministry of Health for their approval. The new station, which will be on the site of the present station, will include twelve houses for members of the fire brigade and an omnibus inspection area. The estimated cost is £13,390.

Plans passed by the MORECAMBE Corporation: Bungalow, Queen's Drive, Bare, for Mr. G. H. Wright; two houses, Woodhill Lane, for Mr. Wm. Sanders; house, Lodges Grove, for Mr. A. E. Dent; four bungalows, Tibicar Drive, for Mr. S. Shackleton; two houses, Yealand Avenue, for Mr. J. Woolfenden; house, St. Patrick's Walk, for Messrs. J. Harrison and Son; four bungalows, off Lancaster Road, Torrisholme, for Mr. G. Jackson; twelve houses, Shortlands Drive, for Mr. L. Knowles; house, Mount Avenue, for Miss Jephson; additions, West End Road, for Christian Spiritualist Church; two houses, Mount Avenue, for Mr. J. H. Laity; church and school, Balmoral Road, for First Church of Christ Scientist; three houses, Heysham Road, for Mr. R. Kitchen; six houses, Lancaster Road, for Mr. H. L. Moody.

The Miners' Welfare Fund has made a grant of £5,250 to the Durham County Education Committee towards the cost of the erection of a mining centre at WEST STANLEY.

The DURHAM County Education Committee has decided to acquire a site near Easington Village for the erection of a mining centre for the East Coast area.

The Durham County Education Committee is seeking loans of £32,000 and £36,500 for the erection of intermediate schools at Shield Row and Tyne Road, WEST STANLEY.

The Durham County Education Committee is to convert the intermediate school at SEAHAM HARBOUR into a secondary school at an estimated cost of £3,000.

The OLDHAM Corporation Baths Committee has asked the borough engineer to prepare for consideration, plans showing alternative schemes for the erection of a public washhouse on land adjoining the Hollinwood baths.

Plans passed by the OLDHAM Corporation: Alterations, "Conquered Bear Inn," Huddersfield Road, and "Clarence Inn," Wellington Street, for Rochdale and Manor Brewery Co., Ltd.; alterations, Palladium Picture Theatre, Union Street, for Palladium Pictures, Ltd.

The preparation of the site for the new Corporation garage in BRADFORD, which is to cost £32,000, has involved the demolition of two gasometers, the filling in of pits 60 feet and 75 feet in diameter, and the diversion of the course of Bradford's beck.

IRELAND

At a meeting of the CLONMEL Mental Hospital Committee an application was made for a loan of £30,000 for the erection of new buildings and the reconstruction of a portion of the Clonmel Workhouse, to provide accommodation for upwards of 400 male inmates, the loan to be chargeable to the North and South Ridings of the county. It was decided to apply for the loan.

MISCELLANEOUS

The CAPE TOWN Corporation has approved plans prepared by the city engineer for the erection of a bathing pavilion on the beach at Woodstock at a cost of £25,000.

The CAPE TOWN Corporation has passed plans prepared by the city engineer for the provision of an open-air warm water swimming bath adjoining the Sea Point Pavilion at a cost of £12,000.

SCOTLAND

The GLASGOW Education Committee is to erect two temporary schools at Ruchil and Knightswood.

The British Linen Bank is to erect a bank at the corner of Fulton Street and Great Western Boulevard, Knightswood, GLASGOW.

Plans passed by the GLASGOW Corporation: Thirty-two houses, King's Park Avenue, Cathcart, and 186 houses, Carmunnock Road, Cathcart, for Messrs. Mactaggart and Mickel; 756 houses, Croftfoot Road, Aikenhead, for the Western Heritable Investment Co., Ltd.

The revised estimates for the proposed municipal garage at the old Dundee prison buildings were considered by a sub-committee of the Transport Committee of the DUNDEE Town Council. These will amount to about £40,000, which is a reduction of £10,000 on the original estimate. The scheme embraces the cost of erecting the new garage, altering the old garage at Lochee Road, transforming the governor's house into offices, and all necessary changes to make the garage complete and up-to-date.

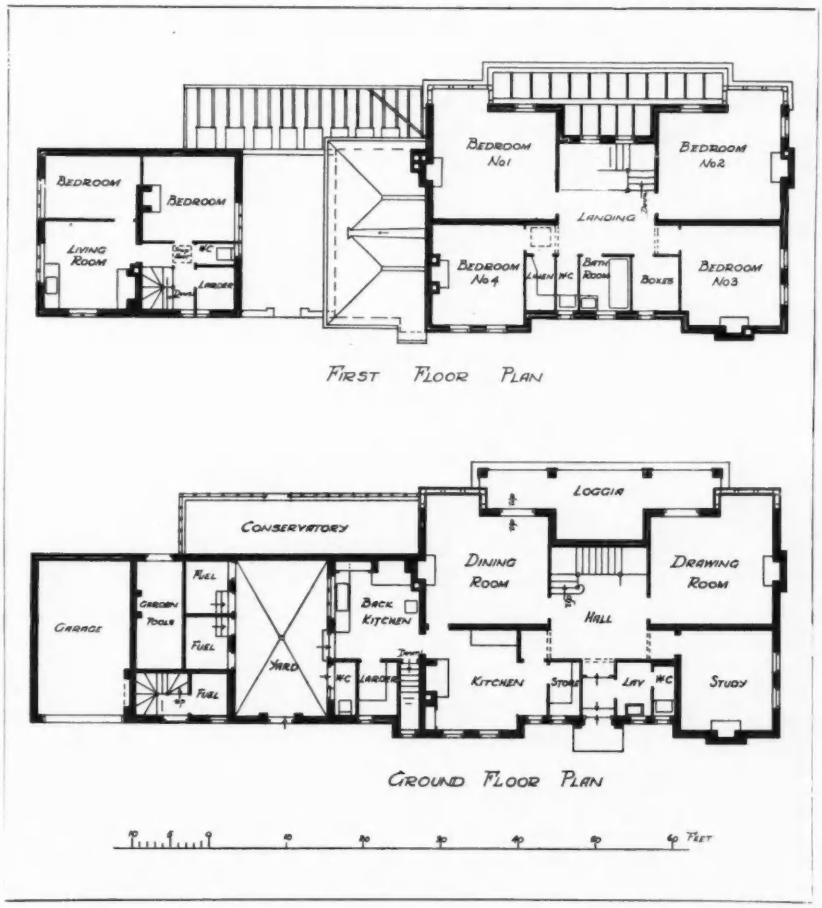
WALES

The SWANSEA Corporation has approved plans submitted by Mr. T. E. Merrels, for alterations and additions to a cinema in Main Road, Mumbles.

The SWANSEA Water Committee has approved the scheme submitted by the water engineer for the construction of a new concrete reservoir at Newton Mumbles, at an estimated cost of £6,500.

The SWANSEA Corporation has decided to develop further sections of the Townhill and Mayhill housing sites and instructed the borough engineer to proceed forthwith with the work of providing the roads and sewers on the sites referred to in order that the housing scheme may be proceeded with without any delay.

Plans passed by the SWANSEA Corporation: Additions, St. John's Church, Birchgrove, for the churchwardens; 6 houses, Manor Road, for Messrs. Weaver Bros.; additions, Cadle Chapel, Carmarthen Road, for the trustees; additions, 10 and 11 Pleasant Street, Morriston, for Messrs. J. Bendle and R. Griffiths; alterations and additions, 11 and 12 Jockey Street, for Mr. H. R. Bushell; house, Penfilia Road, for Mrs. J. John; 2 houses, Moorside Road, for Messrs. Samuel and Evans; house, Brookvale Road, for Mr. D. Griffiths; 2 houses, Dunvant Road, for Messrs. W. H. Harding, Ltd.; house, Southward Lane, for Mr. W. C. Mitchell; sub-station, Townhill Road, for the Corporation Electricity Committee; 2 houses, Dunvant, for Mr. J. L. Jones; 14 houses, Mayhill Road, for Messrs. Rogers and Davies; 4 houses, Caswell Road, for Mr. E. H. Davies; 2 houses, rear of Queen's Road, Mumbles, for Mr. E. Davies; warehouse, Northampton Place, for the Refuge Assurance Co., Ltd.; additions, Victoria Works, Wychtree Street, for Messrs. B. Hinds & Co., Ltd.; building, 9 Hall Street, for Mr. Nicholas Murphy; 2 houses, Lon Illtyd, Cwmgwyn, for Mr. D. Griffiths; 6 houses, Penyrheol Drive, off Gover Road, for Mr. J. C. Oliver; house, Dunvant Road, for Mr. T. L. Hoskins; 2 houses, Caswell Road, for Mr. E. H. Davies; 11 houses, Delabeche Road, Sketty, for Mr. J. O. Watkins; house, Hazel Road, for Mr. D. D. Rees; 9 bungalows, Langland, for Mr. T. Lloyd.



House at Guildford. Designed by Thomas R. Clemence. Ground- and first-floor plans. The house stands on the south slope of the North Downs, to overlook which the principal rooms, conservatory and loggia have been designed. Above the garage is a self-contained flat consisting of a living-room and two bedrooms for the use of a chauffeur.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_2	Barnard Castle	N.E. Coast	1 6	1 1½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Bursiem ..	N.W. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury ..	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster ..	Yorkshire	1 7½	1 2½
B	Dorchester ..	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich ..	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2*	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_1	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_2	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour*; LABOURER, 1s. 4d. *per hour*; NAVVY, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.

Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; BRICKLAYER, 1s. 9d. *per hour*; PLUMBER, 1s. 9d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour*; LABOURER 1s. 4d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	0
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	0	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour*; DO. *fixer*, 1s. 10d. *per hour*; LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour*; TILER, 1s. 9d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:							
Portmadoc Ladies					£13	0	0
Countess					25	0	0
Duchess					32	0	0
Old Delabole	*Med. Grey*				*Med. Green*		
24 in. × 12 in.	£42	11	3		£45	1	0
20 in. × 10 in.	31	4	3		33	0	6
16 in. × 10 in.	20	18	0		22	4	9
14 in. × 8 in.	12	1	0		12	16	3
Green Randoms, per ton					8	3	9
Grey-green do., per ton					7	3	9
Green peggies, 12 in. to 8 in. long, per ton					5	13	9
In 4-ton truck loads, delivered Nine Elms station.							
Clips, lead, per lb.					£0	0	6
Clips, copper, per lb.					0	2	0
Nails, compo, per cwt.					1	6	0
Nails, copper, per lb.					0	2	2
Cement and sand, see "Excavator," etc., above.							
Hand-made tiles, per M					£25	18	0
Machine-made tiles, per M.					5	8	0
Westmorland slates, large, per ton					9	0	0
DO. *Peggies, per ton*					7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:			
Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey			Med. Green		
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies, 12 in. to 8 in. long				4	13	6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour*; JOINER, 1s. 9d. *per hour*; LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard			
Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	4
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	3
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	9
DO. framed in floors, roofs, etc., per ft. cube	0	5	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1½ in. thick, per yd. sup.	0	12	0
Maple 1½ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1½ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour*; MATE, *do.* 1*s.* 4*d. per hour*; ERECTOR, 1*s.* 9½*d. per hour*; FITTER, 1*s.* 9½*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour*; MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour (plus allowances in London only)*; LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; FRENCH POLISHER, 1*s.* 9*d. per hour*; PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, ⅛ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ¾ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	⅛ in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	5½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4	9½	7½	—	1	0½	10 —
Figured Oak												
1 side	8½	7	—	10	8	—	11½	—	—	1	6	— —
Plain Oak												
1 side	6½	6	—	7½	7	—	9½	—	—	1	0	— —
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	— —

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THE ARCHITECTS' DIARY

WEDNESDAY, OCTOBER 2

UNIVERSITY OF LONDON. L.C.C. Central School of Arts and Crafts, Southampton Row, W.C.1. Commencement of series of Wednesday lectures on "History of Architecture," by Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

KELVIN HALL, GLASGOW. Housing and Health Exhibition, open until October 19. 10 a.m. till 10 p.m. **10 a.m.**

THURSDAY, OCTOBER 3

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting, Letchworth. Members and their friends assemble at their hotels in Hitchin, Baldock, and Letchworth.

FRIDAY, OCTOBER 4

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting. At Icknield Halls. Address by Sir Edgar Bonham Carter, K.C.M.G., C.I.E. "Garden Cities, Satellite Towns and Decentralization." 10 a.m. Lunch at Icknield Halls, 1 p.m. Motor coach tour round Letchworth, 2 p.m. Institute Dinner at Icknield Halls, 7.15 p.m. **10 a.m.**

SATURDAY, OCTOBER 5

Sunrise 7.6. Sunset, 6.30.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS. Visit to London Telephone Exchanges—City, Central, and Trunk. Meet G.P.O. (South), Carter Lane, E.C.4, at 2.15 p.m. **2.15 p.m.**

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting. Motor coach tour to points of interest on the North Orbital Road. 9.30 a.m. Lunch at Welwyn Garden City. 1.30 p.m. Tour of Welwyn Garden City. 2.30 p.m. Dinner at Letchworth Hall Hotel. 7.30 p.m. **9.30 a.m.**

SUNDAY, OCTOBER 6

TOWN PLANNING INSTITUTE. Eleventh Annual Country Meeting. Visit to Cambridge, to inspect Colleges, &c., under expert guidance. Lunch at University Arms Hotel.

MONDAY, OCTOBER 7

LONDON UNIVERSITY, Gower Street, W.C. Opening of Session.

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. Opening of Session.

UNIVERSITY OF LONDON, University College, W.C.1. Opening of Session. Students received by Provost and Professors, 10 a.m. to 1 p.m. **10 a.m.**

TUESDAY, OCTOBER 8

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last day of entry for R.I.B.A. Intermediate Examination.

UNIVERSITY OF LONDON, University College, W.C.1. Students received by Provost and Professors. 10 a.m. to 1 p.m. **10 a.m.**

THE ILLUMINATING ENGINEERING SOCIETY, 32, Victoria Street, S.W.1. Open meeting (devoted to Reports of Progress, Exhibits, etc.). The meeting is preceded by light refreshments at 6.30 p.m. **6.30 p.m.**

WEDNESDAY, OCTOBER 9

UNIVERSITY OF LONDON, University College, W.C.1. Students assemble for Evening courses in architectural design and architecture atelier. **5.45 p.m.**

THURSDAY, OCTOBER 10

BEDFORD COLLEGE, Regent's Park, N.W. Opening of Session.

UNIVERSITY OF LONDON, University College, W.C.1. Commencement of series of Thursday lectures on "The History of Decoration," by Professor Sir Flinders Petrie. **2.30 p.m.**

FRIDAY, OCTOBER 11

THE ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. Sessional meeting in the Council Chamber, The Castle, Shrewsbury, when discussions will take place on: "Some Notes on Recent Bridges over the River Severn"; "Reconditioning of Houses under the Housing (Rural Workers) Act, 1926"; "The Scope of a House Property Management Department." The chair will be taken by H. D. Searles-Wood, F.R.I.B.A. **4.30 p.m.**

SATURDAY, OCTOBER 12.

Sunrise, 6.17. Sunset, 5.15.

THE ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. Sessional meeting as on October 11.

TUESDAY, OCTOBER 15

UNIVERSITY OF LONDON, University College, W.C.1. "The History of Greek Sculpture." By Professor Bernard Ashmole. **3 p.m.**

THE LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to Vanburgh Castle, Royal Air Force Memorial School, Blackheath, S.E.3. Applications for tickets to be made to the Secretary of the Society. **2.30 p.m.**

THURSDAY, OCTOBER 17

ARCHITECTURE CLUB. At the London School of Economics. Supper Discussion. Report as to arrangements. **5.45 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. **12 noon.**

FRIDAY, OCTOBER 18

TRADES TRAINING SCHOOLS. Presentation of Prizes at the Carpenters' Hall, London Wall, E.C.2. **8 p.m.**

THE LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to Carlyle's House and Museum, 24 Cheyne Row, S.W.3. **2.30 p.m.**

SATURDAY, OCTOBER 19

Sunrise 6.30. Sunset, 5.0.

MONDAY, OCTOBER 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. 12 noon. "Architecture." By L. O. Faraker. 3 p.m. **12 noon.**

UNIVERSITY OF LONDON, University College, W.C.1. "The Elizabethan House." By Arthur Ashmole. **2 p.m.**

WEDNESDAY, OCTOBER 23

THE LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visits to Carreras Tobacco Factory, Mornington Crescent, N.W.1. At 11 a.m., 2 p.m., and 3.30 p.m. Only fifteen persons can attend in each party. Please state which time is preferred. **11 a.m., 2 and 3.30 p.m.**

THURSDAY, OCTOBER 24

THE INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting.

THE LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visits to St. Paul's Cathedral. Canon Alexander will speak on "How St. Paul's has been preserved." Meet inside Main Entrance. **2.30 p.m.**

FRIDAY, OCTOBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chinese Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

WEDNESDAY, OCTOBER 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

MONDAY, NOVEMBER 4

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last date for entry for R.I.B.A. Final Examination.

THURSDAY, NOVEMBER 7

THE INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting.

FRIDAY, NOVEMBER 8

THE ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Modern Incandescent Lighting in Kinema Studios," by Messrs. W. H. Villiers and S. G. Double. **7 p.m.**

SATURDAY, NOVEMBER 9

Sunrise, 7.6. Sunset, 4.21.

THURSDAY, NOVEMBER 14

THE ARCHITECTURE CLUB. Dinner at the Savoy Hotel.

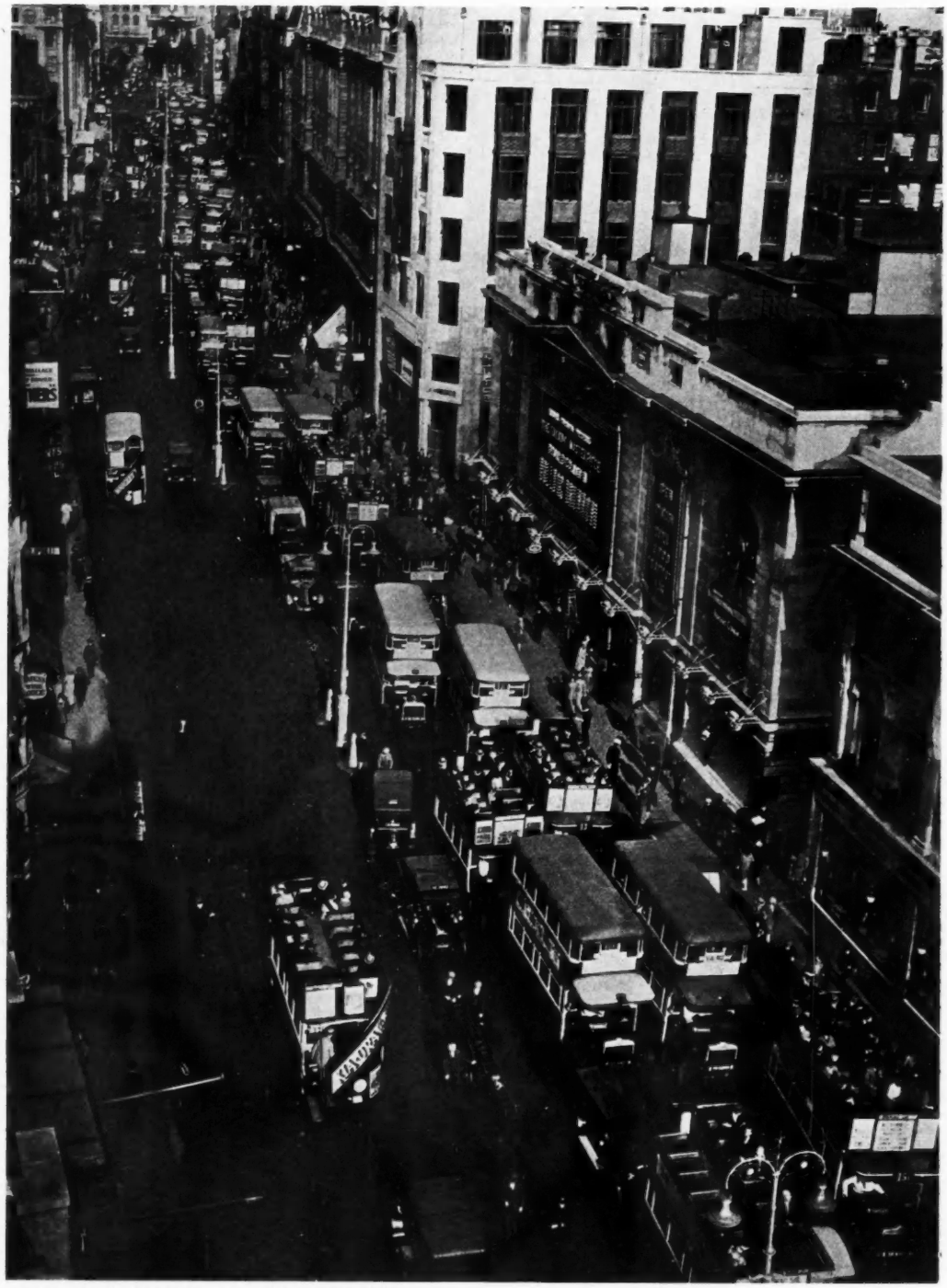
FRIDAY, NOVEMBER 15

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. "Romance of Lead in Industry." By E. Holden, F.COLL.H. **3 p.m.**

MORLEY COLLEGE, Westminster Bridge Road, S.E.1. "Housing." By E. D. Simon, M.P. **8 p.m.**

SATURDAY, NOVEMBER 16

Sunrise, 7.19. Sunset, 4.10.



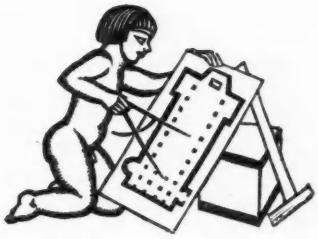
AT A STANDSTILL IN THE STRAND.

How nearly, even under normal conditions, the traffic problem in London's narrow streets approaches the insoluble can be seen daily wherever even a small obstruction is offered to the vehicular flow. When the interruption assumes more formidable proportions, the loss of time and temper has to be experienced to be believed.

Last week, half the width of the Strand was "up" and the unbroken line of stationary vehicles extended, at times, for over a mile in length. This remarkable result is, in effect, due to the formation of a bottle-neck, fortuitous in origin and temporary in duration. It is an object-lesson pointing the crying need for eliminating permanent bottle-necks by adopting uniform building lines. (*See also Astragal's note on the subject.*)

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THE ARCHITECTS' JOURNAL



WEDNESDAY, OCTOBER 2, 1929

PIRACY ON DRY LAND

"*Pieces of eight . . . pieces of eight.*"

—R. L. STEVENSON, *Treasure Island.*

ONE of the causes of callous rural disfigurement was aptly described recently by Sir Leslie Scott. He condemned as "a kind of modern piracy" the action of individuals and syndicates from outside a locality in buying up and developing tracts of land for money-making purposes, regardless of local characteristics and with "no sense of pride in the area."

The exercise of such provisions as are now ready to hand in town-planning legislation can act directly upon such piracy. But such offences can be effectually stamped out only with the determined aid of public opinion. Measures taken under legislation can also act as a tonic to local constructive patriotism, as well as being an expression of such local patriotism. Each constituent portion of an area in which a joint planning committee is in operation cannot but gain a keener sense of its own distinctive qualities in the very process of becoming aware of its interrelation with its neighbours. There is still room, too, for a great deal to be accomplished by indirect means, particularly in education in taste and observation, by local groups and societies. Such organizations can do much to promote and foster that proper "pride of place" which is an essential part of the vitality of our older towns and villages. Lacking that proper pride, they can be little more than dead bricks and mortar, dead stone and lifeless timber.

Mr. Alfred Bossom, as reported in *The Manchester Guardian*, pointed out that the ruining of the countryside is often wrought by "a false sense of commercial progressiveness in trying to bring things up to date." He remarked, too, that "unfortunately we are becoming a little hardened to reading of the passing from the country of . . . works upon which our historic tradition has been built. We . . . custodians of our forefathers . . . have become so hardened that we are losing much of our sensibility. . . . Our present unemployment condition makes all thinking men and women sad, but we are not helping it by destroying the attractions that bring visitors with money to spend here."

That is one of the significant but underrated evils of piracy: its insidious undermining of economic bases. The irreparable damage which it works is sheer destruction without compensating construction. Many a ship flying the skull and cross-bones may be successfully sunk in the seven seas by the skilful navigating of ships on more "lawful occasions"; but the treasure aboard the pirate craft seldom comes back to its rightful owners. More often it is irretrievably lost beneath the tide.

It may be dangerously true that we are apt to become hardened when offences multiply. But to those of us who have made unremitting efforts against unnecessary disfigurement it is satisfactory and encouraging when one can notice a certain stirring of public opinion and public interest in the subject—a stirring very slight it is true, but as welcome as the premonitory movement on the surface in a watched pot. Here are two examples.

Two girl clerks looking out of a railway-carriage window were heard expressing unfeigned distress at sight of an inappropriately placed advertisement hoarding. It was a pleasant surprise to note that it offended the sense of fitness in the minds of the two "business young ladies," who recognized and resented its intrusive vulgarity. Very different in outlook, yet voicing a similar interest in rural England, was an old retired skipper of a Thames barge. He volunteered the information that now he is "ashore" he delights in visiting old villages and seeing "them ol' thetched cottages."

It is evidently not merely the cultivated fastidiousness of the "educated" person, the sensitiveness of the artist, the perceptive faculty of the literary man, the fussy, willing, sightseeing eagerness of the middle-aged tourist that is gripped by the charm of unspoiled country features and hurt by the hideousness that threatens their annihilation. Girls at typewriters or shop counters see these things too. They exclaim "What a shame!" when they notice uglification. The unlettered "sailor home from the sea" may find it hard to voice his appreciation of the simple beauties of rural building; but with him, and with them, as well as with the more articulate public, a reckoning must be made sooner or later by the perpetrators of modern piracy.

NEWS & TOPICS

BANK RATE RAISED

THE raising of the Bank Rate to 6½ per cent. is an event to which architects cannot be entirely indifferent. Statistics are not available which would show the proportion of building activity dependent on borrowed money, but it must certainly be considerable. Thus the building industry will to some extent be adversely affected by the decision of the Governors of the Bank of England; but it is hoped that this period of dearer money will be of short duration. The subject of the relation of credit to industry is of particular importance to architects, because the prosperity of their own businesses cannot be maintained if the policy of the banks is directed to restricting the flow of money. Some day it is even possible that architects will be moved to inquire into the reasons which enable the promoters of schemes of "luxury" building to obtain credit on much more favourable terms than do those who desire to erect buildings of utility; but the subject is a difficult one and raises larger issues than can be referred to in a few sentences. There is no doubt, however, that architects might with advantage give more attention than they do at present to the economic and financial aspects of building.

THE DEAN'S DIPLOMACY

The art of diplomacy has been described as that of appearing to give away everything when one gives away nothing. A diplomat, we are also told, is a person who never says "No" to anything. When he means "No," he says "Perhaps." Few people can have watched the Press campaign which the Dean of Westminster has been conducting in defence of his scheme for a new sacristy without coming to the conclusion that he is a diplomat of the first water. His communications are so sweetly reasonable in manner that the reader might at first fail to perceive the fine pugnacity which lies behind them. The Dean of Westminster is indeed determined not to yield an inch to his opponents; but his latest act of strategy by which he hopes to outwit them appears to have failed in its purpose. For his proposal that the whole question of the sacristy should be referred to a committee of assessors *appointed by himself* seems unworthy to be seriously entertained.

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Meanwhile, it is noted that the "Council for the Preservation of Westminster Abbey," which continues to exist in spite of the diaconal disapproval, has put forward the sensible suggestion that both sides should be equally represented on the committee of assessors, and that this body should be presided over by a neutral chairman. We all await with interest the Dean's reply to this quite reasonable request. The controversy is now reaching a critical phase, and steps are being taken to promote a Parliamentary Bill to control the power of the Dean and Chapter in respect of alterations and additions to the fabric of the Abbey. However, it is rumoured that possibly a solution of the problem will be found in the utilization of the space adjoining the Poets' Corner, now covered by the workshops and stores of the masons employed in renovating Henry VII's chapel. If this suggestion is really acceptable to the ecclesiastical authorities, a painful controversy may reach a happy conclusion.

ABOUT BY-PASSES.

The question of by-pass roads is causing a considerable amount of heart-searching just now. People seem inclined to ask such tiresome conundrums as: When is a by-pass not a by-pass, and why? Or again: What should a by-pass pass by? Moreover, it is becoming increasingly difficult to decide whether a by-pass road should be judged on its merits as providing extra space for traffic and so solving part of the congestion problem; as a means of protecting amenity; or as a menace to a hitherto rural and remote district, "introducing to it the disturbing influences that go with the traffic of an arterial road." The last of these three points of view has been recently stressed in the Press, and protests by local residents in localities affected show that feeling is strong on the subject.

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On the other hand, there is the more than merely local question of preserving villages "round London," which is apparently a question to which the answer is a by-pass road. And there are also many other villages farther from London equally deserving of complete preservation, or at least of preservation from the ills which the concentration on traffic facilities may bring with it. The majority of such villages cannot be taken in hand in the way that West Wickham has been dealt with, nor is it altogether desirable that they should be. There are, nevertheless, a number of such villages, particularly those which by their very nature and origin may be called street-villages, which are very pleasant and picturesque, and have, besides, years of useful life before many of their inns and shops and cottages. These would be completely destroyed by road-widening on the old main road on which they stand.

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Their beauty is often more or less "skin-deep"; that is to say, that the street frontage is the village proper. Behind, there are unremarkable buildings or perhaps somewhat commonplace open land, and, at any rate, these parts are of inferior interest. Through such outer portions of the village can most suitably run a by-pass road for long-distance traffic, relieving the otherwise inevitable congestion of the old road, and preserving the street village itself, not only from undue noise, danger, and vibration, but from the inevitable demolition of its buildings, and therefore of the village itself. There are villages of this character along what is now called the London–Yarmouth Road, a title significant of the development of long-distance charabanc traffic, which the Essex County Council contemplates improving. One hopes that the reflections cast on other by-pass roads will not deter this and other authorities from considering the by-pass solution in such cases in their areas.

AN UNDERGROUND ANOMALY

It is increasingly strange that, in spite of so many real improvements carried out on the "Underground," the strap-hanging public still awaits an announcement of the impending provision of the interchange facility which London's Tube system needs most urgently of all. At present, to transfer oneself from the Central London to the Piccadilly line entails coming to the surface at a peculiarly inconveniently situated point in the middle of New Oxford Street, a walk of over a hundred yards along a crowded pavement, the perilous crossings of Southampton Row and High Holborn,

and a fresh di bowels of the earth at the corner of Kingsway. would be both possible and profitable to combine Museum and Holborn stations in fact and in name, with common escalators and communicating subways, as has already been done at Oxford Circus and Tottenham Court Road. Conceivably, too, the Ministry of Transport might make a grant towards the cost of such an undertaking, or the Government guarantee interest on the capital expenditure, under their railway development schemes in relief of unemployment.

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Were both these unsightly and irrationally separated surface stations abolished, and a single modern subterranean concourse, like that under Piccadilly Circus, substituted for them, the company would be the richer for the disposal of two valuable sites and the public could at last enjoy a rational convenience too long denied it. A notable "piece of coincidence" of this very kind was recently completed in Berlin, where the old Kottbusser Tor station on the east-west elevated section between Warschauer Brücke and Wittenbergplatz has been entirely reconstructed some 100 yards west of its former position so as to provide a direct escalator connection with the new north-south underground line linking Gesundbrunnen with Neukölln. This was accomplished in just over a year without any interruption of traffic, although it involved the complete demolition of the former structure, the provision of two temporary running tracks, and the building into the existing viaduct of 1,700 tons of new steelwork. We commend this Berlin example to the notice of Lord Ashfield and the powers that be in that inspiring Broadway skyscraper.

SENSE OR SENSIBILITY ?

Mr. Guy Dawber, among others, views with just approbation Germany's efficient methods of dealing with petrol stations and litter. The supplying of seats to assist the appropriate mental reaction to a fine view is of course another instance of the intelligent German method. Mr. Dawber writes : "German bureaucracy and education have certainly produced a people who consider the welfare of their countryside in a sensible way." That sensible way is by the inculcation of individual responsibility and right pride, directed by legislation. Much as I admire its sense, I cannot but feel that voluntary methods have a greater prospect of success in this country. Something can be wrought here by common-sense remedies, such as seven-and-sixpenny and half-crown fines for dropping paper bags about, and by controlling the design and placing of petrol pumps. But it is impossible to organize a flying squad of sandwich-paper spies, or to set traps for the sowers of cigarette packets in rural lanes. Far more will be effected in the end, though it will take longer to attain, by the way of sensibility.

★

Already some improvement has been noticed in the neighbourhood of village schools where litter receptacles are provided and their use enforced. Much has been done, and much more, I hope, will be done in the near future by County Councils preparing and enforcing by-laws regarding litter in places which they can control. But it is the task and privilege of all right-minded persons to supplement, at all times, official guardianship by infecting their neighbours with their own sensibility to unsightliness. We shall be more disposed to "keep the face of England clean" because we want to, than because we are told we *must*.

THE GROWING CHAOS OF A PLANLESS LONDON

The junction of Charing Cross Road, Bloomsbury High Street, and Tottenham Court Road, with Oxford Street and New Oxford Street is the most obstructed nodal point in the whole of London. Gyratory traffic is physically impossible at this quadruple bottle-neck of intersecting arteries. The only remedy, which was urgently necessary even before the war, is complete replanning and the creation of a new circus by segmental widenings. Yet, owing to the fact that it possesses no town-planning powers for built-up areas, the L.C.C. has had to acquiesce impotently within the past few years in new buildings, erected on the sites of the old Oxford Music Hall and the Crosse and Blackwell factory, being brought right up to the former building line at, or near, the north-west and south-west corners of this crossing. Last year Meux's brewery and some adjacent property were demolished. With the construction of the new Dominion Theatre and the premises on either side of it, the north-east corner has now followed suit. Will the south-eastern have gone the same way before the L.C.C. bestirs itself ? London is no longer rich enough to afford these examples of municipal blindness.

ASTRAGAL



At a standstill in Tottenham Court Road. Traffic congestion at this notorious crossing will not be eased by the opening of the Dominion Theatre (*illustrated on pages 484-490*).



The focal point of interest on the opening night (October 3): the stage and proscenium as seen from the dress circle. The general colour-scheme is blue-grey and silver; the act drop curtain has a rainbow motive.

LONDON'S LATEST PLAYHOUSE

The Dominion Theatre, Tottenham Court Road

DESIGNED BY W. & T. R. MILBURN

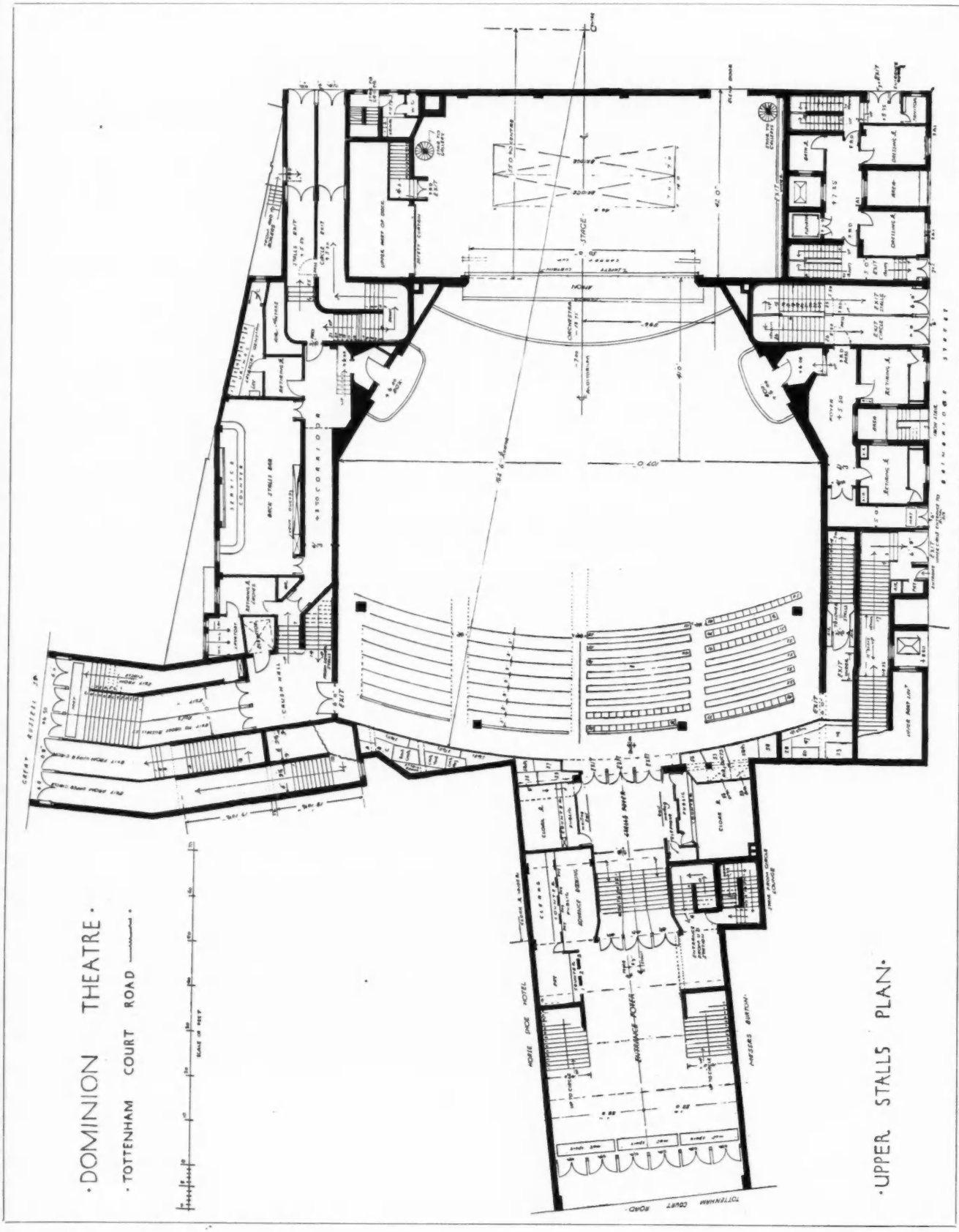
ON the well-known site almost at the thronged intersection of Tottenham Court Road and New Oxford Street, formerly occupied by Meux's Brewery, has now risen the Dominion Theatre, the subject of this article. The site is very much larger than it appears from consideration of the frontage to Tottenham Court Road. Although surrounded at all four corners by other buildings, it has something of the character and advantages of an island, for entrances have been provided from Tottenham Court Road, Great Russell Street, Bainbridge Street (off Oxford Street), and on the fourth side to the stage direct. The exterior elevation to Tottenham Court Road is built of Portland stone, and the classic design has been specially contrived for lighting effects; that to Great Russell Street is in brick, with stone dressings of a simple character.

As in the case of many modern buildings, some of the most interesting proceedings have occurred beneath ground-level. Excavations were carried out to a considerable depth and



Dominion Theatre, London.] [*By W. and T. R. Milburn.*

A comprehensive view from the stage of the interior of the house, which covers approximately a square of 100 feet each way and seats nearly 3,000 people The theatre is intended for the presentation of spectacular musical plays, and the view from every seat in it, right up to the back row of the balcony, will be easy as well as uninterrupted. The footlights (as well as the other lighting panels) are equipped for colour-lighting on the Samiloff principle.



Dominion Theatre, London. [*By W. and T. R. Milburn.*

relics of the former brewery were encountered. Among other considerable works are the formation of ventilation ducts of a size so big that a motor car could be driven through them. Air ducts connect all parts of the building to a very large heating and ventilation chamber, where fresh air is introduced from above roof level, more than 70 ft. away. It is cleansed in an elaborate cold-water system and distributed by a large fan. The same chamber also contains four sectional boilers, pumps and other apparatus in connection with heating.

Some intricate machinery for the manipulation of scenic effects is also housed underground, including lifts for raising portions of the stage to any desired height by electrical power. Below ground-level are also provided electrical and bandsmen's rooms, a music library, and so forth; and, of course, the elaborate foundation structure, which includes enormous grillages to support the steel columns of the main structure. For the building is entirely steel-framed, and its weight is carried on these grillages to the firm London gravel.

Apart from picture-houses, this will be one of the largest theatres in London, and its stage, which comes on or about ground-level, is correspondingly spacious, measuring nearly 100 ft. broad by 40 ft. deep. The opening is one of 50 ft. and is naturally protected by a fireproof curtain, while sprinklers and other fire devices are provided throughout. The stage scenery will be all worked by the aid of counterweights, and the grid is of steel. The auditorium itself is practically a square of 105 ft. in plan, and the accommodation of the stalls floor is 1,340.

Following current tendencies, the comfort of the artistes has received special consideration. A lift is provided to convey them to all floors; and every dressing-room is equipped with hot and cold water, heating radiators, electric light, and special wardrobes. Principal artistes' rooms have their own bathrooms attached, and bathrooms are also provided on each dressing-room floor for general use.

The foyer serving both the stalls and dress circle is approached from Tottenham Court Road, and has an area of 80 ft. long by 40 ft. wide, being flanked with an open marble staircase leading up to the back of the dress circle, in which 818 seats are provided. The upper circle accommodates 677 persons, and is approached from the Bainbridge Street entrance. On this side also is the entrance to the Royal box, which has special retiring rooms and spacious corridors appropriate for its intended purpose. Over the main foyer already mentioned is a retiring room for the use of dress-circle patrons. It measures 66 ft. by 40 ft., and is fitted with a soda fountain. There is also another lounge at first-floor level, extending the full width of the theatre, and 20 ft. wide, with a domed ceiling; so that the accommodation outside the body of the theatre proper is unusually lavish.

There are also managerial offices, board-rooms, and other rooms occupying parts of two floors. The theatre is fitted with a cinematograph projecting cabin and rewinding room, and, throughout, great care has been taken in the interests of the comfort and safety of the patrons. Every seat in the house has an ashtray and a small stand for opera glasses, chocolate boxes, etc.

The mode of decoration adopted is uniform throughout and is of the Late French Renaissance, the colour-scheme being blue-grey and silver treated in clouded effects. As regards the stage lighting, it is interesting to note that battens and footlighting are provided on the latest principle for use in connection with the Samiloff method of stage illumination.

A. B.

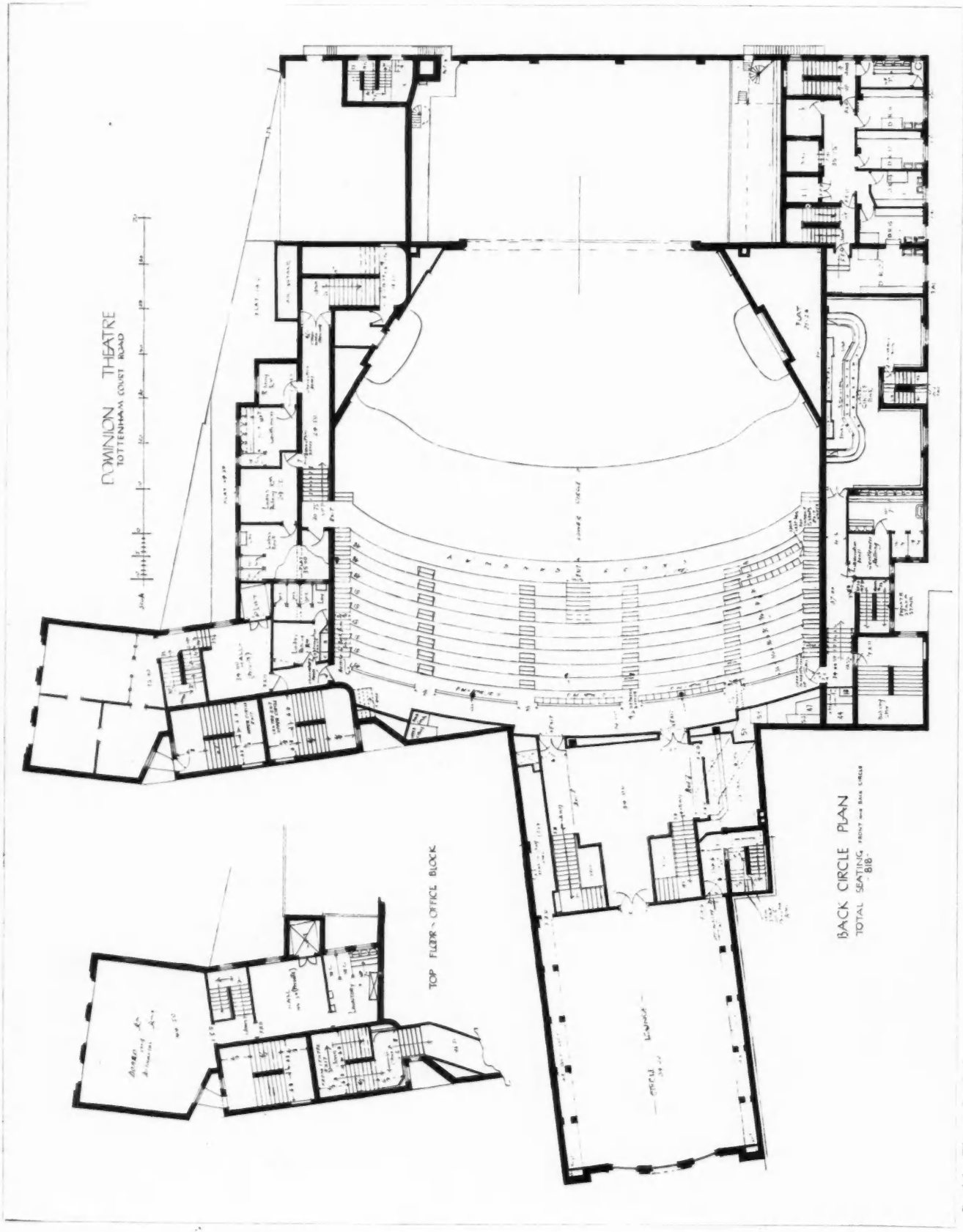


Dominion Theatre, London. [*By W. and T. R. Milburn*

The facade to Tottenham Court Road, in Portland stone, has a forty-foot frontage, and gives little indication of the size of the building, which has three other entrances, one on every side of the site, and therefore enjoys the practical advantages of an island. This photograph, taken a day or two ago, shows finishing work still in progress; in the background is the steel framework of an adjoining new building.

[By W. and T. R. Milburn.]

Dominion Theatre, London.]



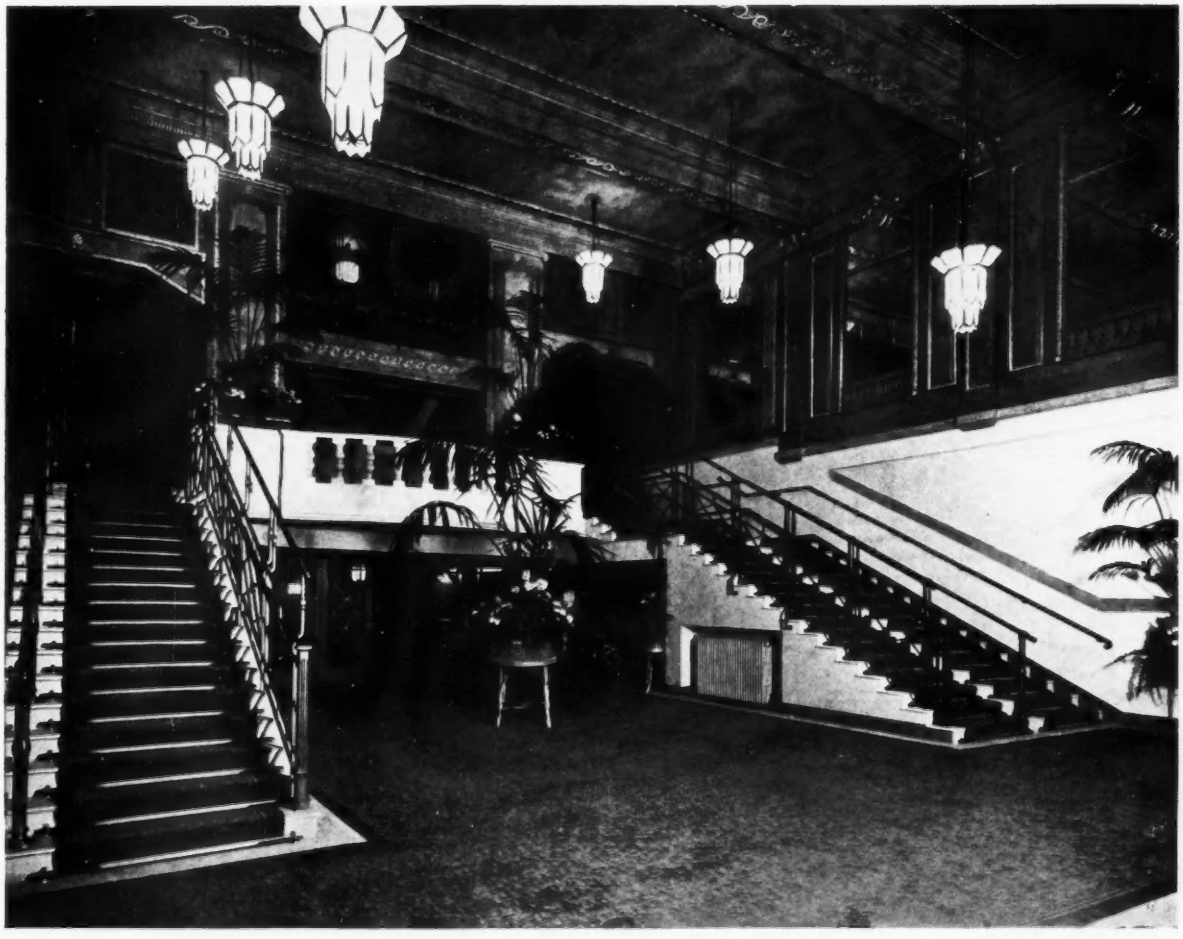
Dominion Theatre, London. [*By W. and T. R. Milburn.*



The circle lounge, finished in a colour-scheme of brown, is equipped with a soda fountain on the side not here shown.



Four of the boxes seen from the circle gangway. The stage box shown on the left is provided with ante-rooms to fit it for Royal use.

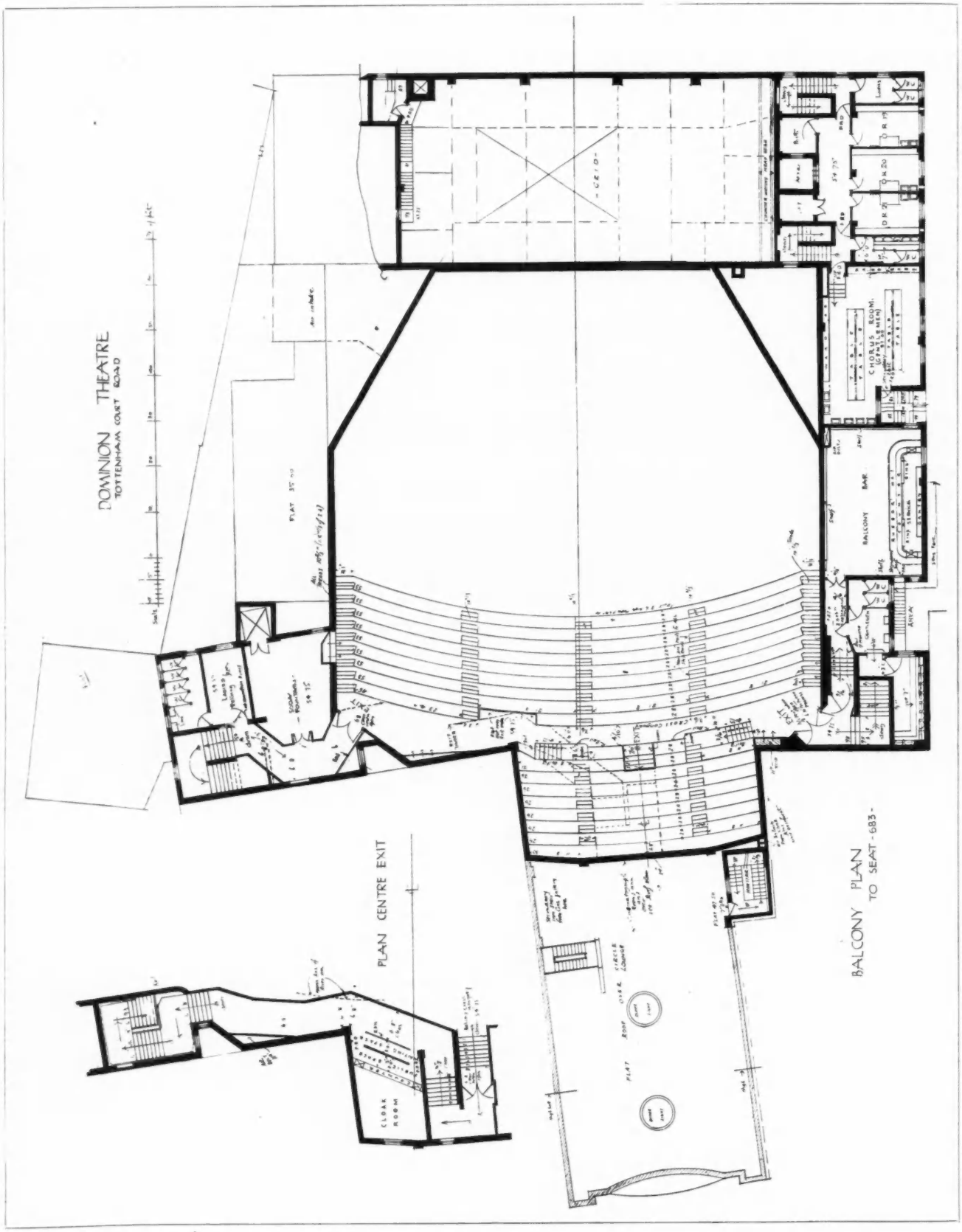


Dominion Theatre, London.] [*By W. and T. R. Milburn.*

Looking from the main entrance doors in Tottenham Court Road up the grand staircase. The doorways into the stalls are seen at the back of the ground floor. The advance booking offices are planned under the left-hand staircase.

[*By W. and T. R. Milburn.*

Dominion Theatre, London.]



Dominion Theatre, London.

[By W. and T. R. Milburn.



[By W. and T. R. Milburn.

Dominion Theatre, London.]

ENGLISH PRECEDENT No. 84

GARDEN PAVILION, CHIPPING CAMPDEN HOUSE, GLOUCESTERSHIRE

Sir Baptist Hicks, first Viscount Campden, built, as his seat, a vast mansion in 1613, soon to be burnt by the Cavaliers. This pavilion and entrance gateway form part of the ruins that remain. The proportions are poor and clumsy, but the ogee-shaped roofs of the two pavilions and the gable finials show fine craftsmanship in masonry.

—[C. M. C. ARMSTRONG.]

THE HONEYWOOD FILE

BY KARSHISH

XXI: Lady Brash Takes Control

Grigblay, the builder, under the direction—and misdirection—of Spinlove, the architect, is getting busy inside the house. Sir Leslie Brash, the client, has gone off on a shooting holiday at such short notice that he has only time to explain that he has not time to write a cheque—much overdue—for his architect's fees.

GRIGBLAY TO SPINLOVE

Dear Sir, 27/8/25

We enclose copy of letter from her Ladyship and await your instructions *re* same. We understand that the partition referred to is that between bedrooms Nos. 5 and 6, and is to be moved to increase size of dressing-room.

Yours faithfully,

ENCLOSURE—LADY BRASH TO GRIGBLAY

Mr. Grigby,

Lady Brash wants the wall in the other big room—not our room—moved nearer from the end as the big wardrobe must go in the dressing-room.

Sunday.

Grigblay knows better than to take instructions except through the architect, although some inferior kinds of builders might not be so circumspect. Some might even welcome this opportunity of making hay of the contract and establishing an uncontrolled account for extras.

Lady Brash has here adopted the style of the great lady gratuitously, for this sort of thing has been far to seek since the war. One has only to consider that the person she addresses is superior to her in heart, in mind, in wisdom, in humour, and also—if the word is to have any right meaning—in education, to realize the absurdity of her assumption. We may imagine Grigblay, a middle-aged man, shouldering a pack in Flanders, while Lady Brash was hoarding provisions, decorating her car with flags of the Allies as if for a boat-race, and speaking of Grigblay and his kind as "Tommies."

SPINLOVE TO GRIGBLAY

Dear Sir, 30/8/25

I have written to Lady Brash. Please tell vour foreman to get on with the work.

Yours faithfully,

Decisive but ambiguous! The manner of it expresses "Lady Brash be blowed!" but the sense is "Alter the partition as directed."

SPINLOVE TO LADY BRASH

Dear Lady Brash, 30/8/25

Mr. Grigblay has sent me a copy of your letter of Sunday. I understand you want the partition moved so as to make the dressing-room wider. Are you really quite sure you would like this? No. 6 was designed as a dressing-room only, though big enough to take a bed on occasion, and there is a door from it to the bedroom No. 5. If you widen the dressing-room by, say, 3 ft., you will *reduce the bedroom by 3 ft.* Have you realized this, I wonder? The result will be that you will have a quite small single bedroom with a door opening into a double bedroom, also so much on the small side that I am afraid you will be disappointed with it. I mention this because I have used particular care not to have any mean-looking rooms, and because I was originally asked to arrange for a good double room with dressing-room *en suite*, and the plan provides this.

If the partition is moved, the windows will be displaced and both rooms will look lop-sided and ungainly—in fact, they will be spoilt so far as appearance goes. Do you not think it would be simpler to put your big wardrobe in another room and, generally, fit the furniture to the rooms? It is really too late now to attempt to alter rooms to suit furniture. It would be a great pity to shift the partition, and I am sure you would be sorry if it were done.

I hope Sir Leslie is having good sport.

Yours sincerely,

Spinlove's difficulty is no less because it is a common one. He is under obligations to be courteous and patient and amenable to his employer's ambitions; but he cannot ignore his own reputation nor that of his profession, and with this is associated the duty of rendering unfailing services so that his client shall be guided to make wise decisions and protected from hasty and foolish ones. The indications are that Lady Brash is so light-witted and so spoilt that appeals to her better judgment will impress her merely as opposition. When such a woman wants anything she has no attention to give to reasons against it; and in this case the lady's mind is probably incapable of holding two ideas at the same time. The best thing for Spinlove to do would be to make up his mind that Lady Brash does not understand what she is asking, and take an early opportunity of cajoling and flattering her to a sounder judgment.

One awkwardness of the position is that even if Spinlove found sufficient justification to do what the wife demands, he could scarcely act without the authority of the husband. If he writes to Brash for that authority and does not get it; or if the lady knows he has written; or if he acts without writing and is taken to task, he is in danger of becoming involved in—well, let us say, an intermission of marital bliss, which may thereafter encumber him with petty dilemmas, make his work a misery instead of a pleasure and his best offices a personal failure instead of a success.

LADY BRASH TO SPINLOVE

Dear Mr. Spinlove,

I do not want any door and I want it in that room as it is the room my sister will have when she comes and it was in our old home and she is used to it so I cannot have it anywhere else as it does not go with the other furniture. Of course I do not want the windows changed only the wall. ["*It*" *is, evidently, the wardrobe.*]

A man came about sweeping the chimneys. He said his name was Mr. Williams and in new houses the chimneys cannot be swept unless you get on the roof and break the tiles so I really do not know what to say. I wish Sir Leslie was at home to see about it. How chilly the wind has been!

With kind regards,

Yours v. sincerely,

Friday.

A touting chimney-sweep has apparently been telling the poor woman that flues are sometimes so built that they cannot be swept.

SPINLOVE TO LADY BRASH

Dear Lady Brash, 3/9/25

I will see that the chimneys can be swept without anyone having to get on the roof. I will call at eleven on Saturday morning and settle with you what is to be done. Yes, the wind has certainly been rather chilly.

With kind regards,

Yours sincerely,

This looks more hopeful.

The letter which follows deals with so many points of detail that I will interpolate my comments.

GRIGBLAY TO SPINLOVE

Dear Sir, 4/9/25

Our foreman took down the partition between rooms Nos. 5 and 6, but her Ladyship now says that it is the one between Nos. 8 and 9 she wanted moved. Her Ladyship seemed very much upset, and directed Bloggs to take down the latter partition which he has now about finished. This, as you know, is a double breeze partition. Her Ladyship said you decided to increase dressing-room 3 ft., but we do not think you can intend that on account of linen cupboard. (See plan.)

[*Spinlove mentioned 3 ft. as an illustration only, and had in mind another partition.*]

Four feet nine seems the least we can manage with, and that will bring the wall very close up to window. You will remember there was a post on this partition supporting purlin. Bloggs has got this pinned up temporarily, but we shall want a steel joist to take this post, which we think is the best way out of the difficulty. We take it the binder carrying this partition, which is finished as a plastered beam on ceiling below, will remain, and the new binder put in above level of ceiling.

The heating engineer says he does not see how to run his return which came down in the corner of this partition. We told him we would chase wall, but that is an awkward job, as it is only 4½ ins. [*the inner lining of hollow external wall, presumably*], and we are afraid the casing cannot be made flush with wall, as it is a 2-in. pipe, even if we sink back of casing where the unions come. We shall be glad of your immediate instructions as the work is being delayed; also authority for extra.

Watkins started glazing their casements, but we had to stop their men as her Ladyship says they are wrong. We understand sheet or plate is wanted. We had to let Watkins's men go away, which is a pity, as we have had a lot of trouble to get them.

[*Watkins must be sub-contractor for the iron casements, and his fixing of leaded glazing is referred to.*]

There is a sweep been hanging about who said he was engaged by her Ladyship to sweep the chimneys. Bloggs told him he had no orders for him, but he afterwards found the man at work and two of the labourers had to see him off the premises. We mention the matter as we should like her Ladyship to understand that we had no instructions to admit the man, and as we are responsible for this work we prefer to entrust it to our own workmen. The parging is green as yet.

[*The builder is under contract to sweep flues to prove they are clear and have been properly built for sweeping.*]

The alteration to the partition will push the lavatory basin in the bedroom so far over that we shall not be able to get the waste into the waste head taking those of dressing-room and room beyond, and a separate head and vertical waste will be necessary, and we do not see how this can be made to clear the garden entrance and window below.

[*The dressing-room is perhaps 7 ft. wide, and Spinlove has been able to scheme so that the waste from lavatory fitting in this room, and those in the bedrooms adjoining on each side, shall all discharge into one rain-water head and be conducted to the ground by one inconspicuous vertical pipe.*]

A lead waste carried diagonally over the head of garden entrance and across to the gully receiving the vertical waste would, however, meet the case.

We shall be glad of your early instructions.

Yours faithfully,

[*This lead pipe trailing conspicuously across the wall in close proximity to one of Spinlove's architectural prettinesses, and reaching out frantically to the gully, would be a calamity. Such botches are unworthy of a competent speculative builder—they disgrace an architect.*]

This letter is an example of the disinterested solicitude of Grigblay for the success of the work. Few builders would lay the matter out so fully, but would either put the work in hand or say they could not go on and ask for instructions. It also displays in a remarkable manner how the carefully contrived economies of means to ends, and neat perfections, of a skilful design may be cast into hopeless confusion merely by one act of capricious interference. However, here is some more of it!

GRIGBLAY TO SPINLOVE

Dear Sir, 5/9/25

Since we wrote yesterday we have heard from our foreman that her Ladyship has referred to hot and cold water to be laid on to the drawing-room. We know nothing of this, and ought to have instructions *at once* as the service pipes are being got out and this will mean a change in the layout, as it is a long run for the pipes and we do not quite see how we are going to get proper circulation. We understand her Ladyship intends an aquarium to stand in bay, so there will have to be a gully to take waste, and as the Surveyor may object to this being treated as rain water [*sure to do so!*], we shall have to lower the top manhole. [*So that the extension may drain to it.*] We were about to build this manhole, but have stopped the work and also that on drains beyond, as levels and falls will have to be altered, and it is no good doing the work twice over. We think the Surveyor will insist on a vent pipe by gully. [*The extension is at the top end of drainage system and a vent pipe is required in that position.*] Would you wish this on the gable beside the bay window, which seems the best position?

We shall be obliged by your immediate instructions.

Yours faithfully,

Spinlove, we may be sure, has exercised his best ingenuity to arrange that this unsightly 4-inch pipe running up the walls and sticking up above roof eaves shall be hidden away, and the prospect of its becoming the salient feature of the most sappy part of a studied elevation will cause him anguish.

SPINLOVE TO GRIGBLAY

Dear Sir, 5/9/25

I was dumbfounded to learn that you have allowed your foreman to pull down and alter the work in face of my written instructions to the contrary. I tried to get into touch with Mr. Grigblay on telephone today. Will he please ring me up without fail tomorrow morning?

I confirm my telephone instructions that no further alterations are to be made except by my explicit directions. I am at a complete loss to understand why it should be necessary for me to remind you of so well-established a rule. It will certainly be necessary to put the work back as it was before, and I must look to you to do so, but kindly note that *nothing is to be done* until I am in a position to give complete instructions. I shall see Lady Brash on Saturday and will write to you next week.

Yours faithfully,

GRIGBLAY TO SPINLOVE

Dear Sir, 6/9/25

We write to confirm and record statement made to you by Mr. Grigblay on telephone this morning that he acted in accordance with your instructions (see your letter of 30/8/25) to "go on with the work," which we naturally read to mean to do the work ordered by her Ladyship. Our understanding that the partition between Nos. 5 and 6 was intended, was, we hold, confirmed by your letter.

We note that no further work is to be done until we have your explicit directions, but must point out we are being stopped and that we shall not only have to claim extension of time as well as the extra, but shall have to compensate heating and other sub-contractors and ask you to consider our own position, as we have had to pay off labourers and drain-layers, and we may have to send away plasterers shortly, and these are difficult to get. We shall be glad of a certificate for £2,000 further on account.

Your last certificate, dated 6/8/29, has, so far, not been honoured. If you can help us in this matter we shall be obliged.

Yours faithfully,

Lady Brash, at a touch, has not only brought confusion to the work, but has given both the architect and builder sore heads. Grigblay has been indefatigable in good offices, but the dislocation of his organization is a serious matter for him and he evidently has no intention of being victimized. He is entitled to look to his architect to protect him.

LADY BRASH TO SPINLOVE

Dear Mr. Spinlove, 6/9/25

The men took away the wrong wall! It really is all most trying and difficult and so very vexing when

they will not do what they are told and putting it in all in little squares one cannot see out of and the servants cannot clean properly because of the corners and complaining about it. The men have made a path through the wood all along where the bluebells come for a short cut through the hedge instead of going out at the gate, what Sir Leslie will say when he comes back I really do not know and I thought I should never get the dust out of my eyes they are quite sore still. The man who came about the chimneys complained that Mr. Bloggs was very rude and would not let him because he did not want him to find out and he says because the chimneys are made crooked and cannot get a brush up to sweep them and perhaps the house will be burnt down. If I had any idea what a trouble it was all going to be I would never have consented, but Leslie will not listen to a word I say and the factory chimney was smoking yesterday and all blowing across and I knew what it would be and if they don't put a proper water-pipe it means the garden hose through the window like we had at Pilchins Drake though I am sure I shall never like the house as much as Pilchins and the fish dying. Really I feel so worried with it all I scarcely know where I am. Phyllis is still away she is always such a comfort.

Yours sincerely,

The poor woman has made herself ill in her anxiety to see things right, and I feel sorry I have said such savage things about her. She opens her heart to Spinlove in a way that shows she has a friendly liking for him and understands he is on her side, although she does not at all understand that the builder is working under his direction. Spinlove ought to have no difficulty in establishing her peace of mind and guiding her to a wise decision if he relies upon her confidence in his good offices and her obvious liking for him, and avoids any assumption of authority. Apparently, however, the receipt of this letter and Grigblay's by the same post have made him again lose his head.

SPINLOVE TO GRIGBLAY

Dear Sir, 7/9/25

I cannot accept the position you take in your letter, but agree you had grounds for misunderstanding. Later on I will discuss the question with Mr. Grigblay and come to some arrangement; in the meantime, I will do my best to get a decision from Lady Brash.

I have wired to Sir Leslie Brash, which will, I hope, help matters, and I am writing to him. He is still in Scotland and will, no doubt, pass you a cheque on his return. Your application for certificate has my attention.

Yours faithfully,

SPINLOVE TO TINGE (QUANTITY SURVEYOR)

Dear Mr. Tinge, 7/9/25

I enclose particulars of the state of the work and of certificates granted. Grigblay has asked for a further £2,000. You will see he had £3,000 only four weeks ago.

Will you let me have an estimate of value of work done.

Yours truly,

TELEGRAM—SPINLOVE TO BRASH

7/9/25

Brash, Achoe, Glen Taggie, Inverness. Work held up urgent writing Spinlove.

It is difficult to see what purpose Spinlove had in sending such a telegram except to put Brash off his aim for the day.

SPINLOVE TO LADY BRASH

Dear Lady Brash, 8/9/25

I came down expressly to see you on Saturday, as arranged, and was disappointed to find you out for the day. I have this morning received your letter.

I am very sorry to know you are so worried, but the alterations you want involve all sorts of difficult questions which cannot be settled except at an interview, and your letter makes allusions to matters of which I know nothing. If you will make an appointment, I will gladly come down and settle things with you. Perhaps you could telephone. I rang up and left a message for you this morning, but have heard nothing.

It will not do to delay, as the builder has already had to send away some of the men and the works will be in part stopped if something is not decided at once.

I have received a rather stiff letter from Mr. Grigblay pointing this out and, of course, it all means extra expense.

I could come down tomorrow afternoon if you will telephone before 11, or early on Thursday. I shall not be in town on Wednesday, and have an appointment in London on Thursday afternoon.

With kind regards,

Yours sincerely,

PS.—As I have already mentioned, you need have no anxiety about the chimney flues. I will see they are all right.

It is difficult to imagine a much more tactless letter. Spinlove asks the poor soul not to worry and then tells her of various causes for worry of which she is happily unaware.

(NEXT WEEK : XXII—A STORM IN A PAINT POT)

THE FATE OF LYMORE

Lord Powis's Reasons for its Demolition

The following letter has been addressed by Lord Powis to the editor of *The Manchester Guardian* :—

SIR,—As I have reluctantly come to the conclusion that it is necessary to demolish the interesting old half-timbered house, Lymore, near Montgomery, I think that I ought to give the public who are interested in old historic houses the reasons which have compelled me to arrive at this decision. Lymore is a half-timbered house, black and white, which was completed about the year 1675, and no alterations or additions have been made to it since. It has not been inhabited regularly for considerably over a hundred years, but I and my predecessors have endeavoured to preserve the building.

Lymore is scheduled as an ancient monument by H.M. Office of Works, and about two years ago H.M. Office of Works gave me a full report on the condition of the house, when it was found that a considerable sum of money would have to be spent upon it to preserve it.

This sum being more than I felt justified under present conditions in spending upon the house, I offered it on lease at £1 per annum to a tenant who would be prepared to put the house in order, either to preserve it as it is or to use it as a residence. I then offered it through H.M. Office of Works to the nation, but it was declined on the ground that the Office of Works had already undertaken the repairs of as many castles and buildings as they were able to deal with out of the grant made to them by Parliament. I then advertised the house in this country and in America for removal and rebuilding elsewhere, but without any satisfactory result.

Since the house contains much valuable oak panelling, a very fine staircase, and oak floor boards of considerable beauty and interest, it seems to me folly to allow all this to deteriorate and in time become worthless. I have therefore reluctantly come to the conclusion that the only thing to do is to sell the panelling, staircase, oak, etc., in the house in lots by auction on October 23, and I have obtained the consent of H.M. Office of Works to do this.

Yours, etc.,

POWIS

THE HOUSE OF WILLIAM BRUCE: IV

An Architect's Home

And Its Influence on English Architecture

The photographs and measured drawings published this week, of the Fish Gate and the east façade, complete the chief external features of the house to be considered here. They will be followed by illustrations of details selected from its interior.

IN comparing Kinross with Coleshill, we have, first, the smaller area of the apertures in relation to the wallage. If, after studying for some time an illustration of Kinross, one turns to one of Coleshill, it is difficult not to wonder for a fraction of a second whether one is not looking at a French house. A great deal has been written about he French affinities of Scottish architecture; there are even people who hold that this architecture is little more than an offshoot of that of the Loire Valley, than which, in point of fact, few have less in common with the Scottish.

The contrast between Kinross and Coleshill should be sufficient to convince anyone that the real contacts of Scottish architecture are with the northern Continental countries down to the Netherlands. The fenestration of Kinross, indeed, is more like the fenestration of Villnäs in Finland than any seen farther south.

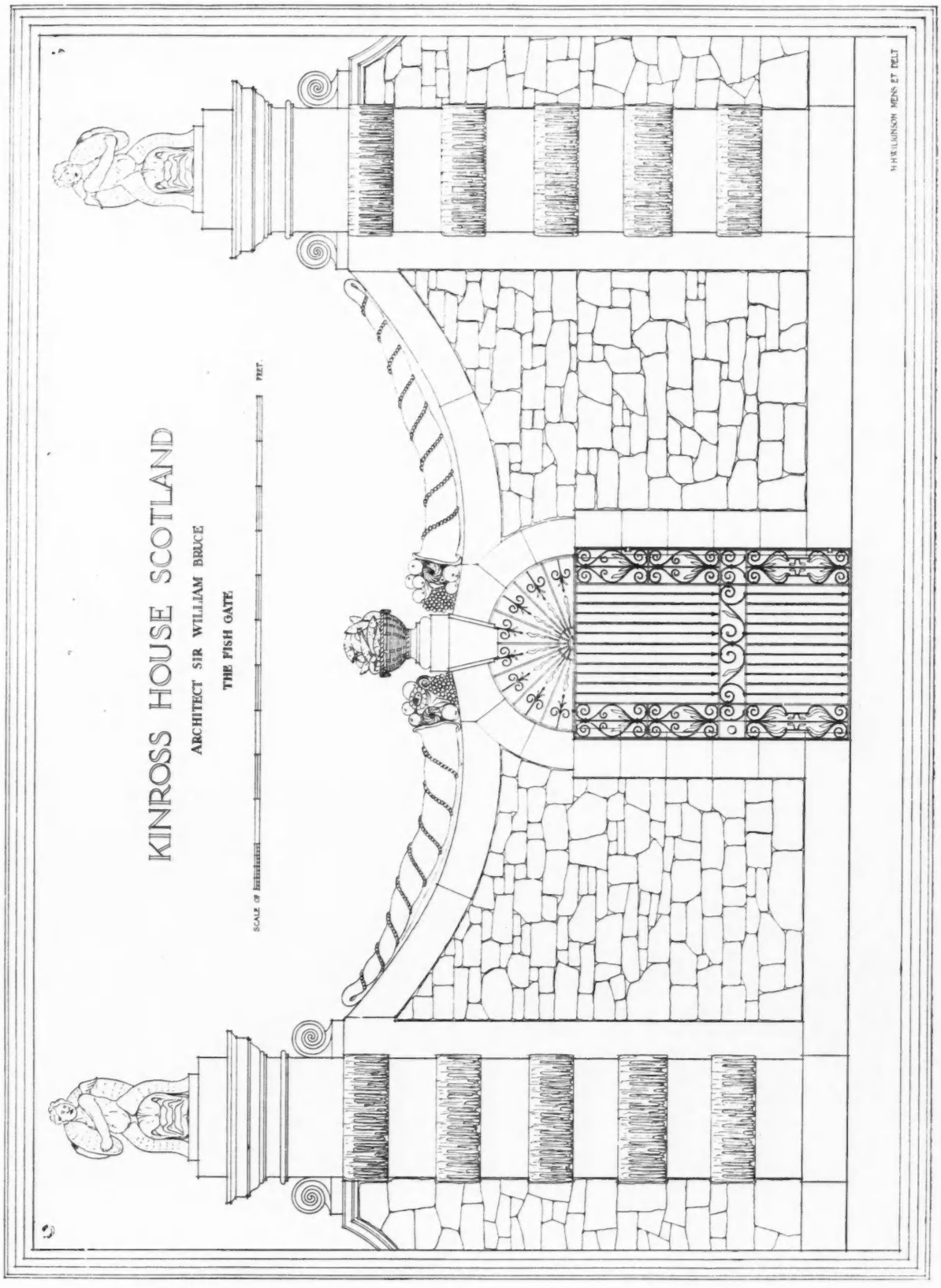
What is the consequence of this reduction of the size of the apertures? It is, of course, to increase the possibilities of variety in architectural design. Where the apertures are unusually large, as in the modern factory, the building inevitably resembles a rectangular grid, and the architect's chances of introducing variety into his composition are precisely *nil*. Hardwick Hall, Derbyshire, and other similar houses are only one step removed from this tyranny of the rectangular window. Kinross, then, points to a new kind of achievement in domestic architecture.

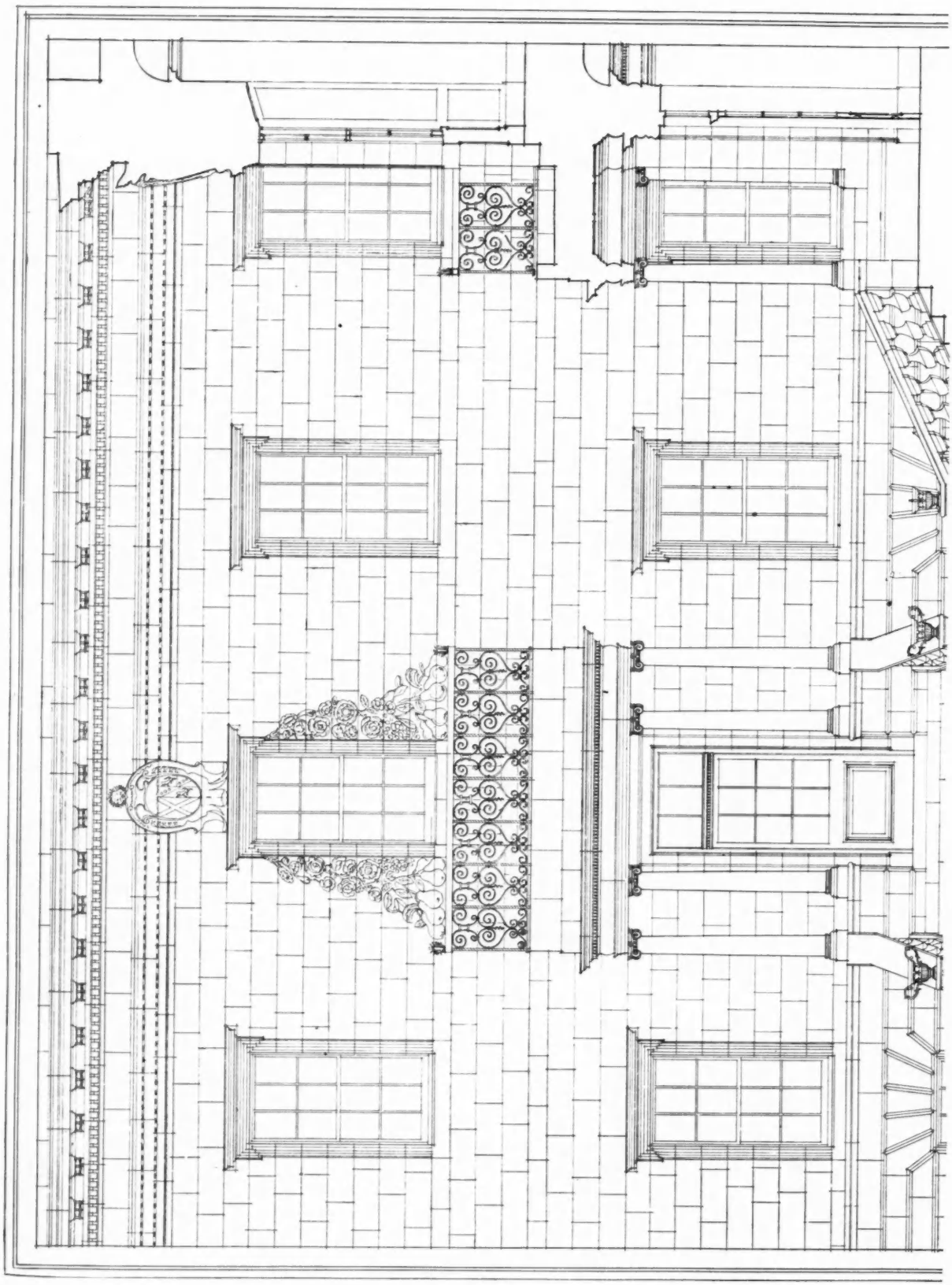
In the second place, we observe that Kinross is clearly the product not of a country of manors, but of a country of towers. The projecting bay in an English façade was even in Bruce's time obviously reminiscent of its origin, which is the bay window of the hall. Raynham Park, Norfolk, is a design which may usefully be set beside Kinross to illustrate this contrast. The use of vertical, tower-like masses, more emphatically present in Thirlestane and Drumlanrig, but subjected at Kinross to the dominion of

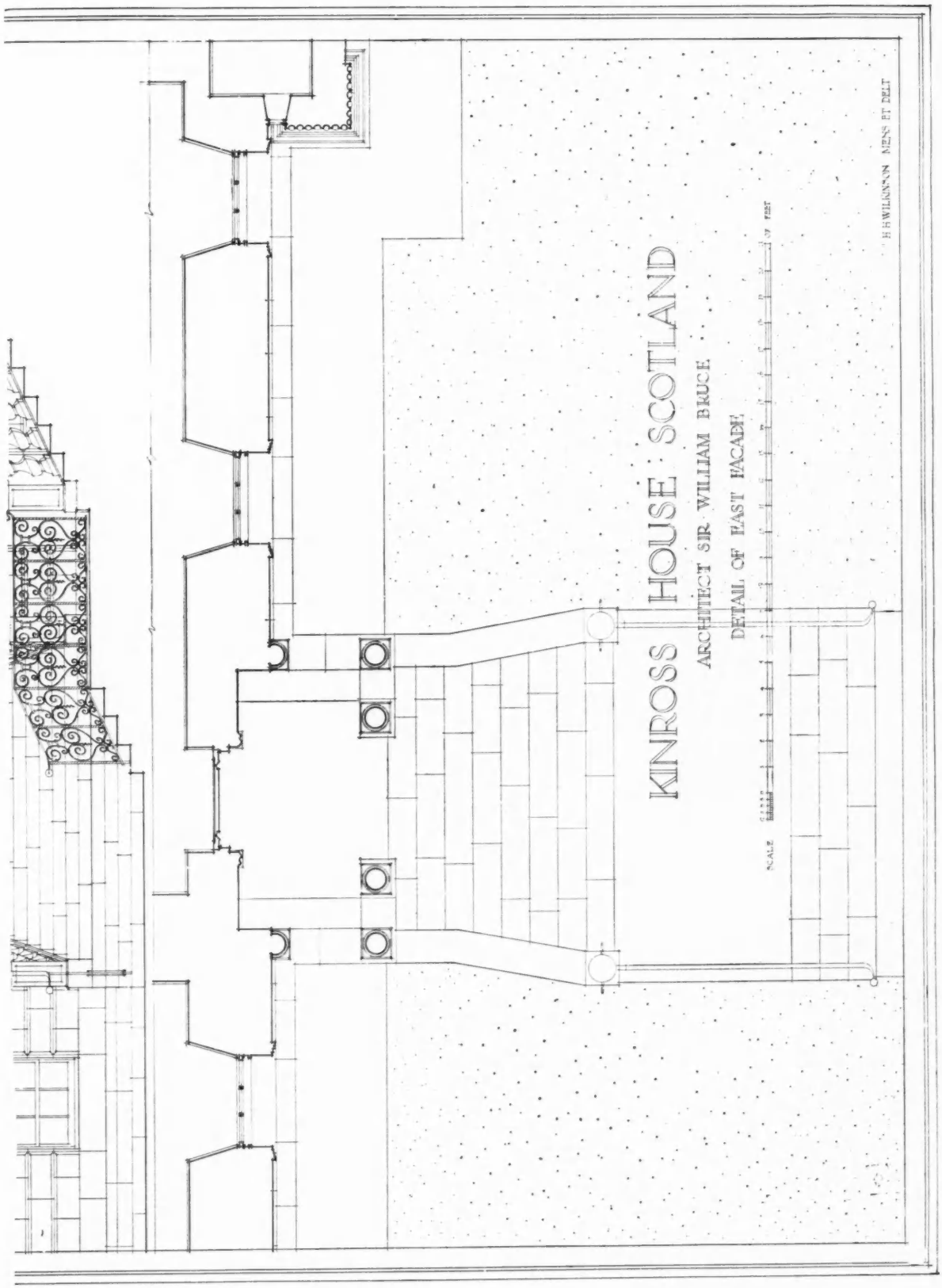
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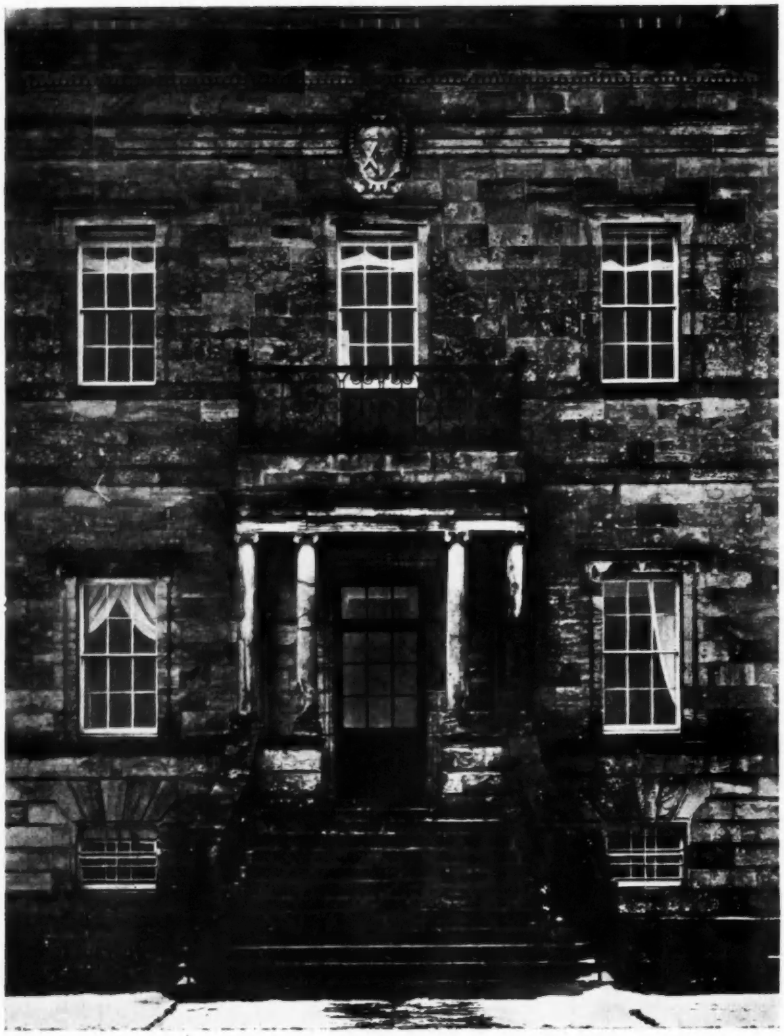
The ornaments to the Fish Gate at Kinross House embody a pair of sculptured figures with dolphins above the piers, and a basket of fish, flanked by cornucopia discharging the kindly fruits of the earth, above the gateway opening itself.


KINROSS HOUSE SCOTLAND
ARCHITECT SIR WILLIAM BRUCE
THE FISH GATE
SCALE OF FEET
W.H. HUTCHINSON MENS ET DELT





(A photograph of this subject appears on the following page.)



This photograph of a portion of the east façade of Kinross House (taken when snow was on the ground) is intended to accompany the measured drawing reproduced on pages 498-9.

a strict classical scheme, is a well-known characteristic of late-eighteenth-century architecture in England. It is second in importance only to the comparative smallness of the aperture.

There remains, in the third place, the dwarf attic under the eaves, hardly more than a parapet, and reminiscent of Michelangelo's upper storey on the courtyard side of the Farnese Palace, or, more strikingly, perhaps, of Sanmicheli's earlier Palazzo Pompei at Verona. There is certainly nothing comparable with it among the fully-developed attics ("their figure that of a pedestal," says Chambers) of Wren and his successors.

Bruce may, indeed, be regarded as the first British architect to incorporate his top-storey windows within the framework of the classical order. Before him, these windows could do one of two things: take the form of dormers, as at Coleshill, or mingle with the principal windows in the body of the wallage below, as at Dyrham, Gloucestershire.

The attic was more highly regarded abroad than at home, for within a few years Tessin put one into his own town house in Stockholm. In England it became the fashion rather to place the upper windows in "the Frieze of the Entablature that encompasses the Building," as Kent puts it. But if Bruce's solution, until Sir Edwin Lutyens arrived to vindicate it with admirable skill, was largely rejected in favour of the stock Italianate device, his more important work lay in that he was able to apprehend and state the problem to which these alternative solutions were offered.

(To be continued)

THE ABBEY SACRISTY

The following is condensed from a statement to *The Times*, published on September 26, by Mr. J. G. Noppen, hon. secretary of the Council for the Preservation of Westminster Abbey. "A committee of assessors," he says, "appointed by the Dean and Chapter, could hardly, we think, expect to gain the complete confidence of the public. The Dean may have every intention of calling upon the services of those whom he considers to be best qualified to deal with such a problem, but it would be quite easy for him to appoint a committee consisting entirely of those who hold his own view. While no opinion on the committee can be expressed until the names of those who form it are known, I think both sides ought to be equally represented, with, if possible, a neutral chairman.

"I should like to make it clear once more that the council does not feel that it should make alternative suggestions. Its view from the first has been that once the Dean and Chapter are convinced that it would be unwise to proceed with the proposed scheme, it is for them and them alone to decide as to which alternative should be adopted. . . . The Dean and Chapter should be prepared to make some sacrifice in convenience in order to avoid adding to the old fabric. . . .

". . . The Dean showed some resentment at the name of our council. I may say that it was difficult to find a suitable name. . . . We should like to have the Dean's assurance that in objecting to our title he is not really objecting to our object. We should like to feel that he regrets having to build and that he will seek an alternative in a determined manner."

Mr. Noppen is reported as concluding with the quotation, *in extenso*, of the dictum of Archbishop Benson with regard to the earlier (memorial chapel) scheme of 1891—a dictum which THE ARCHITECTS' JOURNAL must claim the credit of having unearthed and been the first to apply to the present controversy (see the issue of August 21 last).

"We feel, too," says he, "that the statement made by Archbishop Benson in 1891 on the subject of adding to the old fabric applies equally today."

The gist of that statement was: "The north side of the Abbey is the only part of the Abbey in which you see the whole design of the church by itself. . . . Therefore the erection of any building against it . . . would completely block out the original conception of the Abbey, and would prevent a view of the elevation."

Astragal comments on the subject in this issue.

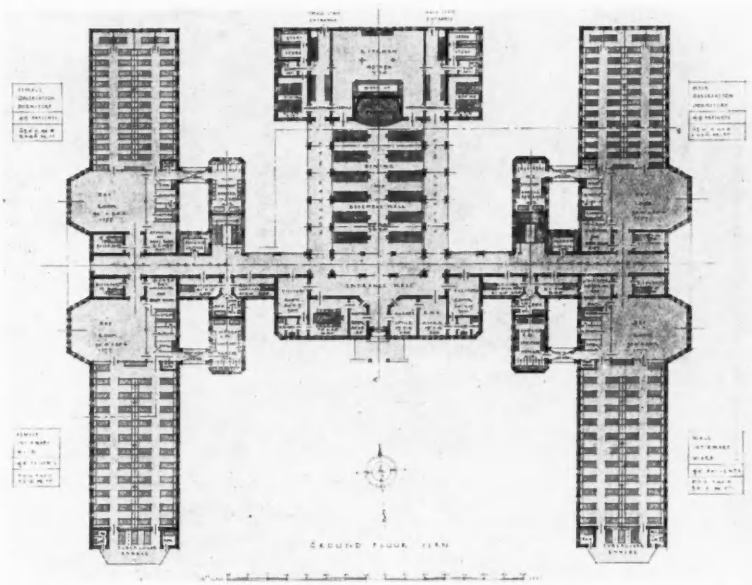
ARDEE MENTAL HOSPITAL COMPETITION:

The Dormitory Problem

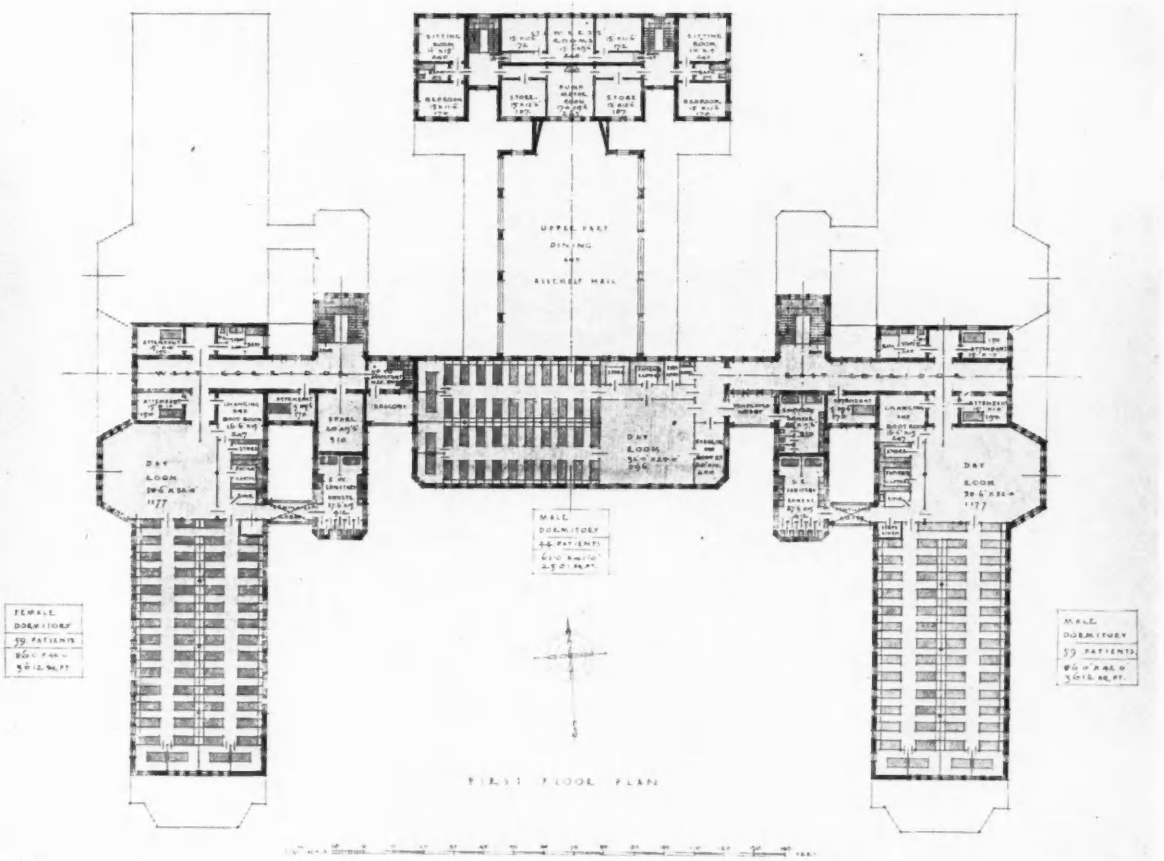
In his critique upon the designs submitted in the Ardee Mental Hospital Competition, published in the issue of THE ARCHITECT'S JOURNAL for September 18 last, our contributor wrote: "I should like to express sympathy with Messrs. Collcutt and Hamp as the authors of a very able design incorporating a dormitory plan four beds deep. The writer has discussed the subject with an official of some experience, who stated that, in spite of prejudice against this type as being unhygienic, they are by far the most economical to work."

The point being one of considerable interest, we now publish the plan drawings of the architects concerned, showing their proposed layout: it will be noted that the system is provided for in all the three dormitories.

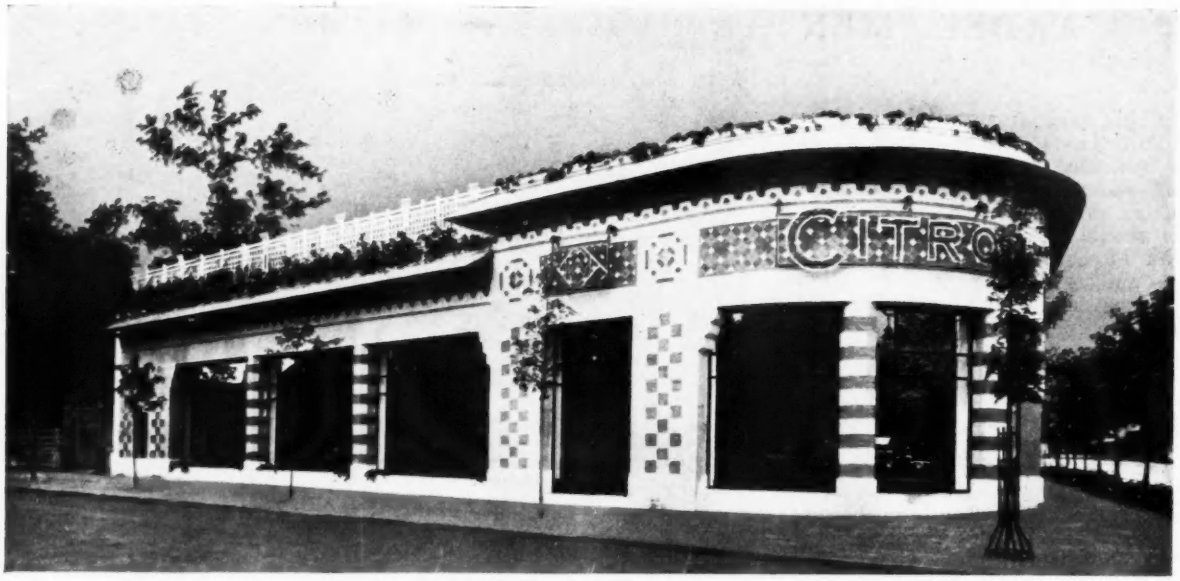
Thirty-four designs were submitted in the competition, in which the placing was as follows: First: H. T. Wright, of Newcastle-upon-Tyne; Second: W. N. Adams, of London; Third: Beckett and Harrington, of Dublin.



Ground-floor plan, reproduced here to show the relation with the upper dormitory floor.



Dormitories four beds deep were provided for in the design submitted by Messrs. Collcutt and Hamp. "In spite of prejudice against this type, they are by far the most economical to work," remarked our critic in his article on the competition plans.



Frontage to the Avenue de la Republique of the Citroen garage at Deauville, a representative modern example. Bricks, tiles, and terra-cotta form the patterns.

CHAIN GARAGES ABROAD

With Illustrations of Typical Citroën Practice

BY P. MORTON SHAND

THE vocabulary of the motor-car, like that of the aeroplane, is still predominantly French in all languages, as words in such daily use as a chassis," " chauffeur," and " garage " continually remind us. France gave the world the first practical *ad hoc* model of the large commercial garage, just as she had given it the first practical models of the motor-car itself. The Garage Ponthieu in Paris, constructed by the Brothers Perret as early as 1905, which was appropriately enough one of the first recognizably Modernist buildings, is still as emphatically modern as a garage as the Théâtre des Champs-Elysées is modern as a theatre. Indeed, it is the recognized exemplar on which nearly all the large garages that have succeeded it have been modelled.



About the showroom interior of the Deauville premises, illustrated, as to its exterior, above, there is a grateful absence of fussy ornamentation.

What is probably the largest garage in Europe was recently opened in the Rue Campagne Première, between the Boulevard Raspail and the Boulevard Montparnasse. This is a concrete building of several floors connected by ramps, with a rather ugly, pinkish Modernist façade of offices and flats. It has been designed by M. Henri Sauvage for a capacity of 1,000 cars (most of which belong to a Paris taxicab company) and also provides 200 private lock-ups.

Among other typical modern Paris garages and showrooms may be mentioned that originally built for the Alpha-Romeo Company by M. Mallet-Stevens (who is now engaged on a large garage for the Peugeot Company), the Garages Modernes at Passy, the Garage St. Philippe du Roule, and M. Roux-Spitz's remarkable transformation of the stables of the Hôtel Prince Roland Bonaparte into a five-storied garage housing 280 cars—nearly all of which have been illustrated at one time or another in THE ARCHITECT'S JOURNAL. There are welcome signs, too, that such tiresome and irrelevant conventions as the ferns in pots borrowed from concert-hall platforms, or flowering plants in cages suspended from wall



In the case of the building at St. Raphael (Var), a becoming concession has been made to the neo-Provencal style of the Riviera.

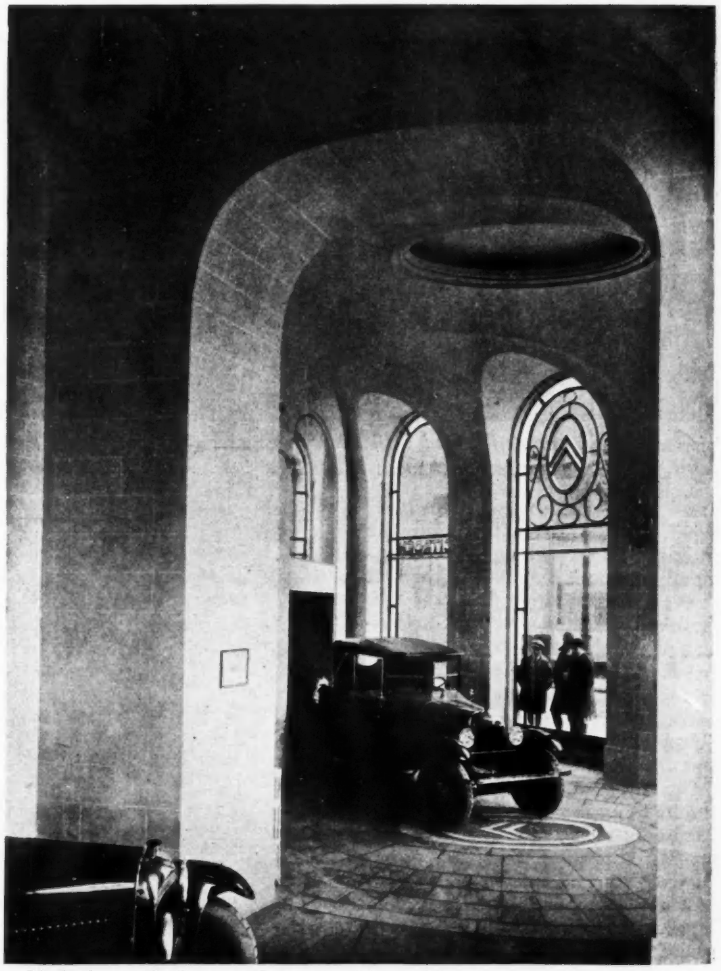
brackets, together with bathroom linoleum flooring and stands roped in by velvet cords or bronze chains, are ceasing to be considered absolute essentials of motor showroom design.

At the present moment the garage industry in France is almost entirely under the indirect control of half a dozen leading manufacturers of mass-produced cars—Citroën, Renault, Peugeot, Donnet, Mathis, Berliet, etc. Recently this control has become still more effective by reason of the financial grouping of several of these firms in consortiums with one or more of the manufacturers of higher-powered cars. It may be interesting, therefore, to examine the prevailing practice of the first and largest of these firms.

The *Société Anonyme des Automobiles André Citroën* has its own "*service d'architecture*," or architectural department, charged with the design of all new suburban and provincial branches or showrooms, and the extensions of existing ones. In most cases, too, it supervises the plans of its agents' premises in order that as far as possible all garages associated with Citroën cars—and a Citroen garage, marked with its chevroned house-shield, is to be found in even the smallest French town—may have a standardized appearance and equipment.

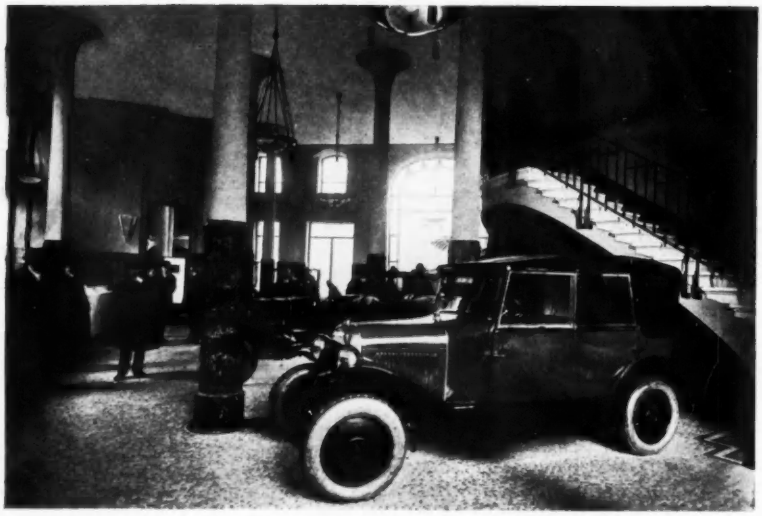
The company prefers single-story buildings constructed with a steel or reinforced concrete framework and hollow brick walls. The latter, besides being fire-proof, are readily removable when changes in the interior distribution of the premises, or extensions of the whole, are found necessary. It is only when the site chosen is too expensive or valuable, as happened at Bordeaux, Nantes, Oran, and Casablanca, that more than one story is resorted to. In these cases ramps are always used, lifts being considered only as subsidiary, or emergency, means of access to the floors above. Part of the premises is always reserved as a reception room for customers, designed so as to isolate the showroom from the workshop in rear. Between the two is placed a store-room for spare parts. The rest of the standard installation consists of the usual mechanical equipment for engine repairs, a subterranean petrol reservoir, a washing and inspection pit, another for the pouncing of car bodies, and a painting cage fitted with pressure spraying apparatus for applying coats of "Duco"—a French proprietary, rapid-hardening, cellulose enamel.

Of the various Citroën showrooms illustrated, that at Deauville, almost identical with another at Evreux, is probably the most typical. In both cases a note of variety has been imparted to the conventional commercial treatment of the window surrounds by the formal patterns in which the brick



No bathroom linoleum, no brass stanchions with red velvet ropes, irrelevantly intrude upon the effective dignity of the Citroen showroom at Nantes.

D



At Bordeaux : Citroen cars on exhibition at the depot, of which the service quarters are illustrated below.

a Chicago garage which occupies twenty-three floors, each holding twenty-five cars, is equipped with car-lifts giving a speed of 600 ft. a minute.

The earliest ramps used in the United States were nearly all of the straight, direct approach kind, with fairly steep gradients. These have been superseded by several more practical types. The Harvey Concentric Ramp has two circular inclines, used anti-clockwise, the outer being for up and the inner for down traffic, with a light well between them. This type, however, is not usually adopted where the ramps will occupy more than 20 per cent. to 25 per cent. of the cubic space available. The Duplex Ramp, on the other hand, which provides two up and two down slopes for simultaneous use without crossings of the tracks, is only suitable for a very large expanse of floor space.

Perhaps the most satisfactory is the D'Humy type, which can be constructed with either single or tandem ramps.



Reinforced concrete or steel-framed, hollow-brick structures of a single story are favoured. Where land costs are heavy, however, as at Bordeaux, several stories are employed, connected not by car-lifts but by ramps ; one is here seen.

tile, and terra-cotta used have been arranged. At Saint-Raphaël, on the other hand, the local agent was encouraged to adopt the Neo-Provençal style now prevalent on the Riviera, with its simple, bold modelling and bright-coloured roughcast effects—an enlightened deference to local tradition and amenity that English garage proprietors might emulate with advantage.

In America, where the new Fisher Garage at Detroit is probably the best recent exemplar, ten-story garages are common, though the present tendency is to consider that a capacity limited to about 600 cars gives the most economical working and results. The ideal site for an American urban garage is declared to be one of some 10,000 sq. ft. abutting on a road at least 45 ft. wide. Lifts are preferred to ramps where the floor space of each story is restricted and peak load hours not too regular. The lifts used are generally of the 200-ft.-a-minute model, though



Another multi-story Citroen garage, at Caen, where a ramp, seen on the left, is employed to provide access to upper floors.

LAW REPORTS

HIGHWAYS : QUESTION OF OBSTRUCTION

Leighton Motor Co., Ltd. v. *Wood Green Urban District Council. King's Bench Divisional Court. Before the Lord Chief Justice and Justices Avory and Branson*

This was an appeal by the Council against a decision of the justices of the Middlesex Sessions, allowing an appeal of the Leighton Motor Co. against a judgment of the Wood Green justices that they had caused an obstruction at the High Road, Wood Green, by allowing cars to stand there for long periods.

Mr. Montgomery, K.C., for the Council, stated that at the point in question there was an old "draw in," but in 1911 the local authority gave notice that this piece of road was a public highway repairable by the public at large, and no legal objection was raised to that by any of the owners of land adjoining it. The Leighton Motor Co. purchased the reversion of buildings adjoining that "draw in" with all the rights attached, and were of opinion that they could still use the piece of roadway for the exhibition of, or as a stand for, their cars. They were summoned for obstruction, and the justices decided against them, but the Middlesex Sessions allowed an appeal by the company on the ground that the company had a *bona fide* claim of right to use the highway and therefore the jurisdiction of the justices to convict for obstruction was ousted because there was a claim of title.

Mr. Glen, for the Motor Co., argued that the "draw in" was a private right.

The appeal was allowed with costs, the Court reversing the decision of Quarter Sessions, ordering the justices to record a conviction for obstruction.

The Lord Chief Justice, in giving judgment, said in this case the only possible claim of right that any person could make with success must be one that was consistent with the character of the street as an undoubted highway. The company asserted that the land was a "pull up," not a right of way at all, but the public had been allowed to use it and under the conveyance the company had a *bona fide* right to place their cars on the land without opposition. The fair result of the company's evidence was that, if it were a highway at all, the land was a public highway *sub modo*, and only after the company had exercised their right to use it for their cars. Such a qualified dedication seemed to be a contradiction in terms, and there was no evidence before Quarter Sessions to enable them to hold that the jurisdiction of the justices was ousted.

Justices Avory and Branson agreed.

AGRICULTURAL HOLDINGS ACT, 1923 : ARBITRATOR'S AWARD

Lord Waring v. *G. Hulme. King's Bench Divisional Court. Before Justices Talbot and Wright*

This was an appeal by Lord Waring from the decision of an arbitrator, that he had failed to agree to arbitration or refused within a reasonable time when his tenant, Mr. G. Hulme, of Holme Farm, Gopsall, Leicestershire, asked to have his rent reduced. Upon that initial finding the arbitrator awarded Hulme £820, being one year's rent as compensation on leaving, which was claimed under the Agricultural Holdings Act, 1923.

Sir Gerald Hohler, K.C., for Lord Waring, said he appealed on an error of law on the face of the award in the finding that Lord Waring failed or refused when the statute, which used those words, meant he submitted that one or other only must be found. The point might seem technical, but there had been a prior quarrel over manure, and the tenant was able, when his rent was not reduced, to go, and to claim compensation as though he had been given notice. He claimed compensation for landlord's disturbance as if he had sought arbitration as to rent and the landlord had not agreed to it.

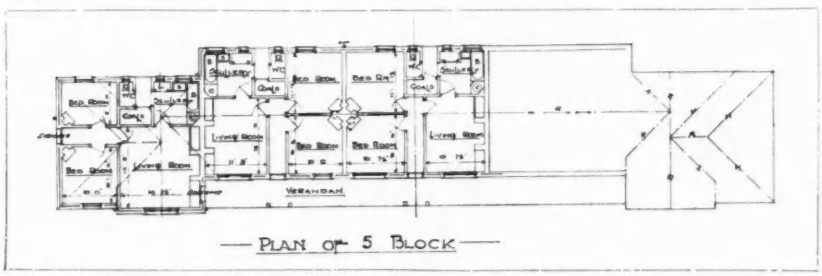
Mr. Joy, K.C., supported the arbitrator's finding, and the Court dismissed the appeal.

Mr. Justice Talbot, in giving judgment, said refusal or failure of the landlord to consent to arbitration were treated by the legislature as one event. Either or both enabled the tenant to take the step the statute allowed. Whether the arbitrator found that one or the other existed, or both, precisely the same consequence followed, and he could therefore define the compensation to be paid to the tenant on going out, as though the landlord had given him notice.

Mr. Justice Wright concurred.



Cottages, Aged Miners' Home, Whitehaven. Designed by C. M. Bentley (R. M. Bentley & Son). View of a block of five cottages.



Cottages, Aged Miners' Home, Whitehaven. Designed by C. M. Bentley. Plan of a five-cottage block. The layout plan of the whole scheme is reproduced on page 507.

OBITUARY

JAMES M. HENRY : 1852–1929

We regret to record the death of Mr. James Macintyre Henry, F.R.I.B.A., of Edinburgh.

A native of Perthshire, he served his apprenticeship under the late Andrew Heiton and as a draughtsman in the office of the late David Bryce. Later, Mr. Henry began practice on his own account, and had for some time the late Mr. J. C. Hay as partner. For the last twenty-five years—in partnership with Mr. T. F. Maclennan—he had carried out many important commissions, including the first garden city in Scotland—that at Longniddry.

In 1912 he was appointed Lord Dean of Guild of Edinburgh and held this position until 1917. He was also a Justice of the Peace. Mr. Henry was seventy-seven years of age.

R.I.B.A. FINAL EXAMINATIONS

Alternative Problems in Design

FOLLOWING is a list of R.I.B.A. problems in design for the year ending December 31, 1930. Additional copies of the list may be obtained on application at the R.I.B.A.

1 : The drawings, which should preferably be on uniform sheets of paper of not less than Imperial size, must be sent to the Secretary of the Board of Architectural Education, R.I.B.A., 9 Conduit Street, W., on or before the dates specified below.

2 : Each set of drawings must be signed by the author, AND HIS FULL NAME AND ADDRESS, and the name of the school, if any, in which the drawings have been prepared, must be attached thereto.

3 : All designs, whether done in a school or not, *must be accompanied by a declaration* from the student that the design is his own work, and that the drawings have been wholly executed by him. In the preparation of the design the student may profit by advice.

4 : Drawings for subjects *a* are to have the shadows projected at an angle of 45° in line, monochrome, or colour. Drawings in subjects *b* are to be finished as working drawings. Lettering on all drawings must be of a clear, scholarly, and unaffected character.

CIX—*a : A design for a Concert Hall* to be erected in an important town on a rectangular island site measuring 250 ft. by 150 ft. One of the short sides abuts on to an important and noisy thoroughfare, and the others on to secondary roads without through traffic. The scheme is to include a Concert Hall to accommodate about 2,000 people, with foyers, refreshment rooms and orchestra and artistes' rooms, and adequate cloakroom and lavatory accommodation. Due regard should be given to the problem of good acoustics and the usual licensing requirements. Any ground not required for buildings should be suitably laid out.

Drawings required : Plans of all floors, four elevations, and adequate sections to explain the design, to $\frac{1}{8}$-in. scale. Portion of the main entrance front to $\frac{1}{2}$-in. scale.

b : Working drawings for Subject No. CVII. *A Club Building for Boy Scouts.* The design for this Club Building may, after it has been approved, be re-submitted with the addition of : Working drawings of the front, including the roof over the gymnasium in plan, section and elevation, to $\frac{1}{2}$-in. scale—with a sheet of full-size details.

CX—*a : A Tea House in a Public Park with Terraces and Formal Gardens* to be erected in a public park on a site facing south and falling towards an existing ornamental lake. The distance of the Tea House itself from the lake is to be decided by the Architect. Funds are available for terraces and formal gardens, with sculpture if thought desirable. The Tea House is to be large enough to seat approximately 100 persons inside, with additional accommodation outside as thought desirable. Adequate service rooms for teas are to be provided, also lavatories for both sexes.

Drawings required : $\frac{1}{16}$-in. scale plan of layout, with the necessary sections. $\frac{1}{8}$-in. scale plans, elevations and sections of the Tea House and its adjuncts.

b : Working drawings for Subject No. CVIII. *A Small Housing Scheme in a Mining District of Kent.* The design for a small Housing Scheme in a Mining District of Kent may, after it has been approved, be re-submitted with the addition of : Complete working drawings for the six Aged Miners' Homes. Plans and elevations to the scale of 8 ft. to 1 in., sections and details to the scale of 2 ft. to 1 in.

CXI—*a :* A design for *A Filling Station and Garage.* The site is on the corner at the junction of an arterial road with a secondary road. The frontage to the main road is 150 ft., the other frontage being 220 ft. The neighbourhood is rural. Accommodation required : Filling station, with petrol pumps, oil, air and water, partly under cover, but independent of garage. Garage : twenty " lock-up " garages and open space for thirty cars, workshop, office, waiting-room, accessory shop, lavatories. House for manager, with living-room, kitchen and offices, three bedrooms and bathroom, etc. Attention should be paid to approaches; signs, lighting, etc., all to be indicated on the drawings.

Drawings required : Plans, elevations and sections. Scale $\frac{1}{16}$ in. to 1 ft. Elevation to arterial road, $\frac{1}{8}$ in. to 1 ft. and $\frac{1}{2}$-in. detail of a portion.

b : Working drawings for Subject No. CIX. *A Concert Hall.* The design for a Concert Hall may, after it has been approved, be re-submitted with the addition of working drawings showing ground plan, and longitudinal section to $\frac{1}{8}$-in. scale.

CXII—*a :* A design for *A Customs Office.* It is proposed to erect, at the quay side for Continental boat traffic, offices for the inspection of passengers' luggage. The site available is 50 ft. deep (exclusive of platforms) and 240 ft. long. The steamers will berth on one long side of the site and the trains draw in on the other. Accommodation : Large hall for luggage inspection having the maximum bench space consistent with easy control and circulation. The public access from boats to trains must be through this hall only. Waiting-room, general office, and passport office. Search rooms for men and women, Customs officers and police rooms with lavatories. Separate refreshment rooms and lavatories on quay side and platform.



The central block of cottages, Aged Miners' Home, Whitehaven. Designed by C. M. Bentley (R. Bentley and Son). The cottages are erected on a site presented by the Earl of Lonsdale.

Drawings required : Plan, sections, and elevations, to scale $\frac{1}{16}$ in. to 1 ft. Quay side elevation to scale $\frac{1}{8}$ in. to 1 ft. and $\frac{1}{2}$-in. detail of a portion.

b : Working drawings for Subject No. CX. *A Tea House in a Public Park.* The design for a Tea House may, after it has been approved, be re-submitted with the addition of $\frac{1}{2}$-in. details such as would be sent to a builder. A sheet of full-size details to accompany these.

CXIII—*a :* A design for *A Housing Scheme in the North-West London Area.* A new industrial concern, founded in North-West London and employing

a large proportion of highly-skilled workers, has decided to build twenty houses for their permanent employees, and for this purpose has acquired a site of two and a-half acres, adjoining a new arterial road. The road runs approximately south-east to north-west, and the land is on the north-east side of the road, in the form of an equilateral triangle with the apex cut off by the arterial road, giving a frontage to this road of 60 ft., from which point the estate will be entered. It is not desired to put any building on the arterial road, and the area round the entrance at this point should be treated with gardens or other features designed as an attraction and as features marking the entrance of the scheme. The ground rises with a slope approximately one in twenty from the road. The houses to contain living-room, parlour, scullery, three bedrooms, etc., the total area, measured over all within the containing walls of both floors, not to exceed 950 sq. ft.

Drawings required : A complete layout and block plan of the site and buildings, showing roads, paths, open spaces, gardens, layout of drainage, etc., to a scale of $\frac{1}{500}$ in. Outline plan and complete front elevations, in their relative positions, of all buildings, to a scale of 16 ft. to 1 in. Plans and two elevations of any two of the cottages to a scale of 8 ft. to 1 in.

b : Working drawings for Subject No. CXI. *A Filling Station and Garage.* The design for a Filling Station may, after it has been approved, be re-submitted with the addition of $\frac{1}{2}$-in. details of the roof truss over garage, and working drawings of the residential portion.

CXIV—*a :* A design for *A Secondary School for about Two Hundred Boys.* A public roadway, 60 ft. wide, runs along the southern boundary of a playing field, and it is desired to erect the School at this end of the field and near to the roadway. There is ample room for the buildings, but they should be so arranged as not to take up an unnecessary amount of the playground. The approaches must be from the roadway. The site is flat. The School will be a day school for boys only, and should provide accommodation for about 200. The buildings may be of one or two stories. The style and material are left to the designer. Provision should be made for the following : Hall to accommodate 250; five class rooms, to accommodate 30 each; two class rooms, to accommodate 20 each; one chemical laboratory, to accommodate 30; small preparation room and store; one physics laboratory, to accommodate 30; small preparation room; one art room, to accommodate 30; one handicraft room, to accommodate 30; four music cubicles; gymnasium; library; a dining-room to seat about 100, with small kitchen, larder, etc.; w.c. and basin for kitchen staff; head master's room; small room adjoining for secretary; small waiting-room; staff common room; staff cloakroom and lavatories, etc.; cloakroom for boys; offices for boys; changing room, with showers; caretaker's store; book store; games store; heating chamber, etc.

Drawings required : Plans of all floors, to $\frac{1}{8}$-in. scale. Two elevations, to $\frac{1}{8}$-in. scale. Sufficient sections to illustrate the scheme.

b : Working drawings for Subject No. CXII. *A Customs Office.* The design for a Customs Office may, after it has been approved, be re-submitted with the addition of complete $\frac{1}{8}$-in. scale working drawings of the Main Hall, and a $\frac{1}{2}$-in. section showing the roof truss.

Dates for submission of designs in 1930 : Subject CIX, February 28; Subject CX, April 30; Subject CXI, June 30; Subject CXII, August 29; Subject CXIII, October 31; Subject CXIV, December 31.

Examination Dates

Following is a list of the dates of the R.I.B.A. examinations to be held in 1929 and 1930 :

Intermediate Examination : November 8, 9, 11, 12 and 14, 1929 (last day for receiving applications : October 8, 1929). May 30, 31, June 2, 3 and 5, 1930 (last day for receiving applications : April 30, 1930). November 7, 8, 10, 11 and 13, 1930 (last day for receiving applications : October 7, 1930).

Final Examination : December 4, 5, 6, 7, 9, 10, 11 and 12, 1929 (last day for receiving applications : November 4, 1929). July 9, 10, 11, 12, 14, 15, 16 and 17, 1930 (last day for receiving applications : June 2, 1930). December 3, 4, 5, 6, 8, 9, 10 and 11, 1930 (last day for receiving applications : November 3, 1930).

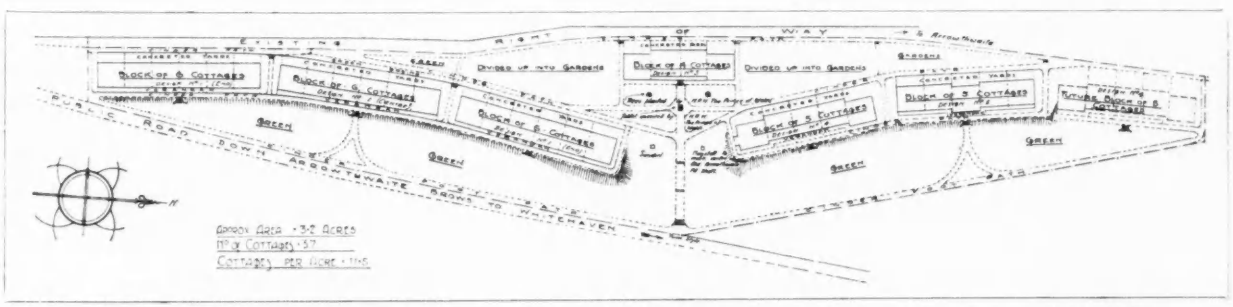
Special Examination : December 4, 5, 6, 7, 9 and 10, 1929 (last day for receiving applications : November 4, 1929). July 9, 10, 11, 12, 14 and 15, 1930 (last day for receiving applications : June 2, 1930). December 3, 4, 5, 6, 8 and 9, 1930 (last day for receiving applications : November 3, 1930).

Special Examination in Design for former Members of the Society of Architects : December 4, 5, 6, 7 and 9, 1929 (last day for receiving applications : November 4, 1929). July 9, 10, 11, 12 and 14, 1930 (last day for receiving applications : June 2, 1930). December 3, 4, 5, 6 and 8, 1930 (last day for receiving applications : November 3, 1930).

Special Examination of Licentiates to qualify as Fellows : November 18, 19, 20, 21 and 22, 1929 (last day for receiving applications : October 18, 1929). April 7, 8, 9, 10 and 11, 1930 (last day for receiving applications : March 14, 1930). November 17, 18, 19, 20 and 21, 1930 (last day for receiving applications : October 17, 1930).

Statutory Examination for the Office of District Surveyor in London and Building Surveyor under Local Authorities : October 16, 17 and 18, 1929 (last day for receiving applications : October 1, 1929). May 7, 8, and 9, 1930 (last day for receiving applications : April 16, 1930). October 15, 16 and 17, 1930 (last day for receiving applications : September 24, 1930).

Town-Planning Examination : June 25, 26, 27 and 30, 1930 (last day for receiving applications : March 3, 1930).



Cottages, Aged Miners' Home, Whitehaven. Designed by C. M. Bentley. The layout plan, shown above, is in the form of two crescents of three blocks each, in conjunction with one of four houses, slightly set back. Each cottage contains a living-room, scullery, and two bedrooms.

READER'S QUERY

LOAD ON FLOOR

E. T. H. writes : " *What is the safe load that may be put on each rib of the reinforced concrete floor shown in accompanying sketch [not reproduced—Ed., A.J.] according to L.C.C. regulations (i.e. load superimposed on the floor) ; concrete 4, 2, and 1 mix ?* "

In questions of reinforced construction, involving, as they often do, calculations that are not frequently handled by the average architect who may by oversight easily miss an important factor or regulation, it is always wisest to enlist the aid of a concrete engineer to whom the calculations are familiar.

In any case, it is advisable for the architect to have a copy of the *Reinforced Concrete Regulations of the L.C.C.*, as embodied in the L.C.C. (General Powers) Act, 1909. A small handbook of these regulations can be obtained from Messrs. Batsford, of Holborn, for 3s. The regulations give definite formulæ of calculations which are too involved to repeat here, but for the purpose of the problem in hand the following will give results near enough for practical work. Taking the notation given by the Act:

A=Area of tensile reinforcement in square inches.

a=Area of resistance moment, in inches.

d=Effective *depth* of beam or slab in inches, from compressed edge of concrete to common *c.g.* of tensile reinforcement.

ds=Total depth of slab in inches.

n=Distance of neutral axis from compressed edge of slab in inches.

t=Permissible tensile working stress on tensile reinforcement, in lbs. per sq. inch (actually 16,000 lbs. per sq. inch).

The actual position of the neutral axis is decided by formulæ given, but if the construction is taken as a tee-beam, the slabs forming a flange 24 × 2 in., the neutral axis can be assumed to be at the base of slab, or top of rib, giving $n=ds$.

Thus, the area of resistance moment in such a case is given by the Act (section 87) as $a=d-\frac{n}{3}$, or approximately $a=d-\frac{ds}{3}$

With the large amount of slab as flange, the compressive value of the concrete can be taken as sufficient, and the tensile strength of the slab the governing factor.

The formula for tensile resistance moment, in section 87 of the Act, is:

$$Rt=tA\left(d-\frac{n}{3}\right)$$

Taking the ½ in. round rod, we get 16,000 × ·1963 × 5·1 = 16,018 in.-lbs.; for the ½ in. square rod, we get 16,000 × ·25 × 6·1 = 24,400 in.-lbs.; total, in in.-lbs.=40,418, or, approximately, 18 in.-tons, as R.

By section 34 of the Act the bending moment on a beam with both ends *fixed* and load uniformly distributed is $\frac{Wl}{12}$

Thus $\frac{Wl}{12}$ must not exceed 18.

With unsupported length of, say, 132 in., this gives $\frac{W132}{12}=18$, or

$W11=18$, or $W=\frac{18}{11}$, or $W=1{\cdot}63$ tons.

Thus the safe load on one rib is 1·63 tons.

It should be noted that section 72 of the Act requires that the effective depth of slabs (from compressed edge to *c.g.* of reinforcement) shall be not less than 3 in. The floor shown does not answer this requirement.

Also the method of placing one rod *over* the other is uneconomical, the fullest value being obtained with the rods *both* at the *lowest* possible point, i.e. 1 in. from bottom edge.

Also, both rods in *round* section would be more economical and simpler to deal with.

The reinforcing rods of the ribs must be carried right across and over the full width of the main beams.

A. H. H.

CORRESPONDENCE

" THESE TECHNICAL FETISHES "

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—It may be desirable to bury cables rather than run them overhead on steel standards. To do so will cost more : apparently that is the reason why the overground method is to be adopted.

But money in the present day is costless to make or to destroy—it consists mainly of figures in books and on cheques and it is entirely possible to control it in the general interest. Currency, too, is liable to artificial fluctuations : as for instance when our national Treasury notes were " taken over " by the Bank of England; on that occasion it appears that over 4½ million pounds' worth escaped, and will not be seen again. (*Times*, May 4, 1928.)

That sum would come in very handy just now for saving the countryside from the proposed disfiguring standards: the C.P.R.E. might note that it would be just as easy to re-create that 4½ millions as it was to destroy it.

ARTHUR WELFORD

NO. 3 BAYSWATER HILL

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Astragal, in his note on " A Bayswater Box of Bricks " has, surely, been rather unfair to No. 3 Bayswater Hill ? This house is not really bad, only out of date. If it lives to be as old as, say, Orme Square close by, it will be " period," and the contemporary Press will moan about the disappearance of " this picturesque row of mid-Victorian houses " when the time comes for them to be pulled down.

Moreover, the house is a good example of one of the Victorian styles. This particular style was born of the reaction from stucco and heavy classicism. It was inspired by the small-scale brick and terra-cotta architecture of the early seventeenth century, and, dull as it is, has its place in the architectural history of the time. Compared with its prototype it has a peculiar hardness and thinness, very different from the generous use of material in Kew Palace or the old Grammar School at Rye.

From various suburbs, of the taken-for-granted kind seldom explored by architects, I could cull a fine collection of buildings in this style: cottages, villas, mansions, and public buildings. Fifty years hence someone will hunt them out with pen and camera, and the result of his researches will become the standard work on the style. To us they are dowdy and graceless, but posterity will discover in them charms we are too near to see. A little while ago architecture ended with the Adams; now we admit there is interest almost up to the eighteen-forties; the turn of the seventies will come, and then No. 3 Bayswater Hill will be measured and drawn and photographed for THE ARCHITECTS' JOURNAL !

In conclusion, may I say how much I always enjoy Astragal's notes.

G. E. MOODEY.

DOMINION THEATRE

Following is a list of the general contractors and some of the sub-contractors for the Dominion Theatre, illustrated on pages 484-90: General contractors, Bovis, Ltd. Sub-contractors : A Dawnay & Sons, Ltd., constructional steelwork; Walter Macfarlane & Co., canopy; Pickerings, lifts; Independent Sprinklers, Ltd., sprinklers; Sturtevant Engineering Co., vacuum cleaners; Battiscombe & Harris, fibrous plasterwork; the Veronese Plastering Co., solid plasterwork; Whitehead & Co., Ltd., marble work; Crittalls, steel and bronze windows; British Reinforced Concrete Eng. Co., Ltd., reinforced concrete; Empire Stone Company, Ltd., artificial stone; Val de Travers, asphalt; Matthew Hall, external plumbing and drains; Evans, internal plumbing;

Plenum Heating Co., heating; Diespeker & Co., Ltd., terrazzo; Trussed Concrete Steel Co., Ltd., reinforced concrete engineers; Hy-Rib ceiling reinforcement; Carter & Co., Ltd., tilers; Korkoid Co., Korkoid floors; L. J. Barnes, Portland stone; the Cement Selling and Distribution Co., cement and vitocrete; the London Brick Company and Forders, Ltd., bricks; Expanded Metal Co., Ltd., expanded metal; Sika-Francois, Ltd., waterproofing; National Radiator Co., Ltd., boilers, radiators and heating batteries; Frigidaire, Ltd., soda fountain; Lockerbie and Wilkinson, cloakroom fittings; Peyton, Hoyland and Barber, and General Electric Co., Ltd., electric light fittings; Lewis Berger & Sons, Ltd., and Pinchin, Johnson & Co., Ltd., paints; Phillips, Ltd., Neon signs; Relay Automatic Telephone Co., automatic telephones; Shanks & Co., Ltd., sanitary fittings; Frank Burkitt, safety curtain. "Redalon" liquid was painted on the centering wherever plaster or cement renderings were to be placed direct on the concrete, not only in the auditorium but also in the foyer, tea-rooms and dressing-rooms.

Interior Decoration of the 18th Century (reviewed in September 18 issue) was wrongly attributed as being published for the London University. Messrs. Tiranti are the sole publishers of this book.

COMPETITION CALENDAR

No date. Competition for the best-designed labour-saving houses in three types, priced at £750, £850, and £1,000 respectively. Premium: 100 guineas. Application for conditions of the competition, etc., should be made to C. E. Oxley, Secretary, B.C.S. Housing Scheme, Chaddeston, Park Road, Derby.

November 2. The City of Birmingham Museum and Art Gallery Committee proposes to erect a Branch Art Gallery at the Pebble Mill Road entrance to Cannon Hill Park, and invites architects practising within the City boundaries to submit competitive designs. Total cost, £6,000. Assessor: Ernest C. Bewlay, F.R.I.B.A. Premium: £100. Application for conditions of the competition, etc., should be made to S. C. Kaines Smith, Keeper, Museum and Art Gallery, Birmingham. Deposit 10s. 6d. Latest date for submitting designs: November 2.

November 8. The Somerset Rural Community Council, in conjunction with the R.I.B.A., invite architects and architectural assistants resident in Somerset to submit designs for Country Garages and Petrol Filling Stations. Assessor: Mr. Harold E. Todd, A.R.I.B.A. Prizes: The "Sir Charles Wakefield" prize, £10 10s. and silver cup presented by the Somerset Automobile Association. Further prizes of £7 7s., £5 5s. and £3 3s. and two cups presented by the S.A.A. Particulars from the Secretary, Somerset Rural Community Council, 42 Bridge Street, Taunton. Deposit 10s. 6d.

November 30. The Hull Corporation invite architects to submit schemes in competition for the façades of the New Street from Paragon Station to Beverley Road, Hull, and openings to adjoining streets. Assessor: Sir Reginald Blomfield, R.A., P.P.R.I.B.A. Premiums: £750, £350 and £150. Applications for conditions of the competition, etc., should be made to J. R. Howard Roberts, Town Clerk, Guildhall, Hull. Deposit £1 1s. Latest date for sending in designs: November 30.

December 7. The Provost, Magistrates, and Councillors of Dumfries invite architects practising in Great Britain to submit competitive designs for the Town Hall and Municipal Offices, which it is proposed to erect on the site of the old Town Hall and of the Municipal Offices, Dumfries. Assessor: Sir George Washington Browne, P.R.S.A. Premiums: £300, £200, and £100. Application for conditions of competition, etc., should be made to R. A. Grierson, Town Clerk, Town Hall, Dumfries. Deposit £2 2s. Latest date for sending in designs: December 7.

January 1.—The Aberystwyth Town Council invite architects to submit competitive designs for the erection of a Municipal Pavilion with Refreshment Rooms and other conveniences on the site of the old Waterloo Hotel, at the corner of the Marine Parade and Terrace Road, extending to Bath Street. Assessor: Arnold Thornely, F.R.I.B.A. Premiums: £100, £70 and £30. Application for conditions of competition, etc., should be made to T. J. Samuel, Town Clerk, Town Hall, Aberystwyth. Deposit, £2 2s. All designs must be sent to the Borough Surveyor, Corporation Offices, Smithfield Road, Aberystwyth, not later than January 1, 1930.

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECT'S JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS.

27451. Atkinson, J. B., and Mitchell, A. Windows. September 10.

27638. Blythe, J., and Swinburne and Sons, and Swinburne, J. C., and Swinburne, T. J. Building-bricks. September 11.

27321. Elwis, C. R., and Gill, W. J. Portable huts. September 9.

27414. Gallego Herrera, F. Foundations for structures. September 9.

27678. Gloystein, F. Wall dowel. September 11.

SPECIFICATIONS PUBLISHED.

318670. Kerman, R. A., and Finlay and Co., Ltd., J. B. Sectional partitions, fencing and the like.

292909. Vriese, H. de, and Vander-Cruyssen, M. Bricks for walls, floors, columns, and the like.

300948. Stern, O. Piles and shoes therefor.

318363. Coldman, J. W. Construction of lift or hoist.

318723. Rogers, R. J. Heating-apparatus for buildings.

ABSTRACT PUBLISHED.

316161. Preston, W., London. Floors.

TRADE NOTES

Architecture in Concrete is the title of an interesting brochure recently issued by the British Portland Cement Association, Ltd. It is illustrated throughout with examples of typical monolithic structures which show how the artistic possibilities of concrete are being taken advantage of by the American architect. Practically the whole of the buildings illustrated are in California. Concrete, it is claimed, can be moulded or carved, stained or coloured, and given any texture desired. It is also stated that by the use of coloured aggregates and their subsequent exposure, the colour of concrete may be varied as desired, fully within a range equivalent to the natural colours of stone. The aim of the British Portland Cement Association, Ltd., is to point out that now that there is a white Portland cement manufactured in this country, marketed, it is claimed, at a price that is not prohibitive, it is felt that artistic concrete work will greatly advance, and that within the next few years England will show examples of artistic concrete structures equal to any abroad. Copies of this brochure may be obtained on application to the British Portland Cement Association, Ltd., 20 Dartmouth Street, S.W.1.

The Portland Cement Selling and Distributing Co., Ltd., has just issued a book of plans, entitled *Ideal Houses*, in which are reproduced 48 designs selected from the many submitted in the Architects' £1,500 Concrete House Competition, which the company promoted in the autumn of last year. A house built to the winning design, and known as "Welcome House," was erected at the last *Daily Mail* Ideal Home Exhibition. Valuable ideas in regard to planning and design may be obtained by architects and builders from this book. Prominent architects—including Messrs. H. V. Lanchester, F.R.I.B.A., M.T.P.I.; Oswald P. Milne, F.R.I.B.A.; Alfred C. Bossom, F.R.I.B.A.; Major C. Harold Heathcote, T.D., and Douglas G. Tanner—have contributed articles on the different aspects of concrete-house construction, to show that the new building material can meet in every way the natural desires of home-seekers, and they indicate that concrete, when properly used, has very considerable advantages.

Copies of the book, which is issued at 3s. 6d. net (postage 6d.), may be obtained from the Secretary of the Portland Cement Selling and Distributing Co., Ltd., Ship House, 20 Buckingham Gate, London, S.W.1.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The EAST HAM Education Committee has decided to build a secondary school for girls on the White House site.

The Office of Works is to erect a telephone exchange on a site at the junction of Kingston Road with Kingswood Road, WIMBLEDON.

The POPLAR B.C. is to provide new washhouses at Sophia Street at a cost of £6,000, including the installation of plant.

The Suburban Developments (London), Ltd., are to develop the Aldborough Grange estate at ILFORD. Plans for 500 houses and shops have been passed by the Corporation.

Plans passed by the KENSINGTON B.C.: Additions, Little Blundell House, Campden Hill; alterations, Stanhope Court Hotel, 51 Stanhope Gardens; additions, 43 Upper Addison Gardens, Holland Villas Road.

Plans passed by the POPLAR B.C.: Substation, Tomlins Grove and Archibald Street, for Messrs. Andrews and Peascod; additions, Wellington Road, for Messrs. W. Gladding & Co., Ltd.; additions, "The Ship" public-house, 290 and 290A West Ferry Road, for Mr. W. Stewart.

Plans passed by the FULHAM B.C.: Additions, Fulham Picture Palace, North End Road, for Messrs. Smith and Brewer; cinema, Fulham Road, for Messrs. Yates, Cook and Darbyshire; building, Imperial Road, for the Gas Light and Coke Co.; new building, Hemmings Bakery, Humbolt Road, for Mr. F. Atkins; new building, Willow Bank Wharf, Putney Bridge, for Messrs. Fenning and Co.; building, 108 Fulham Palace Road, for Mr. G. Jackson; additional building, Church Army Hostel, Star Road, for Mr. E. R. Armfield.

Plans passed by the HORNSEY Corporation: Pavilion, Highgate School playing-field, Hampstead Lane, for Messrs. J. Greenwood, Ltd.; house, Courtenay Avenue, for Mr. W. Quennell; house, Wood Vale, for Messrs. Smerdon Bros.; alterations and additions, "The Old Gate House" public-house, North Road, for Messrs. H. C. Horswill, Ltd.; fifteen houses, Priory Gardens, for Mr. A. T. Day, of 14 Drylands Road, Crouch End; motor service station and lock-up garages, Tottenham Lane, for Messrs. Humphries Holloon, Ltd.; two houses, Goodwyn's Vale, for Mr. C. McLean.

Plans passed by the WIMBLEDON Corporation: Extensions, 98 High Street, for the Westminster Bank, Ltd.; alterations, Prince's Cinema, 109 Merton Road, for Mr. W. J. King; alterations and additions, 163 Haydon's Road, for Messrs. Percy H. Clarke and Son; seven houses, The Quadrant, for Messrs. H. Coombs and Sons; additions, Wimbledon Hospital, Thurstan Road, for Messrs. R. J. and J. S. Thomson; house, Bathgate Road, for Messrs. Arthur Bean, Ltd.; additions, Messrs. Hugh Stevenson's Works, Riverside Road, for Messrs. Jas. Burges and Sons, Ltd.; house, McKay Road, for Mr. A. J. Styles; additions and alterations, 84 Merton Road, for Messrs. Simms, Builders, Ltd.; house, Wool Road, for Mr. A. J. Styles; alterations, "Crooked Billet" beerhouse, Crooked Billet, for Messrs. Young and Hall; offices and warehouse, Mount Road, for Mr. J. R. Musto.

Plans passed by the EAST HAM Corporation: Two houses, Elsenham Road, for Mr. E. J. Tuddenham; five shops, Romford Road, for Mr. H. Johnston; new roads, leading off Saxon and Roman Roads, for Messrs. J. Stokes and Sons; alterations, 41 High Street, for Mr. G. Scott; alterations, 4 High Street, for Messrs. T. Greenwood and Son; alterations and additions, 453 Katherine Road, for Mr. R. C. Turner Gordon; alterations, East Ham Social Club, Barking Road, for Mr. E. Meredith; house and shop, Market Street, for Mr. J. W. Lohden; two houses, White Horse Road, for Mr. J. W. Lohden; alterations, 127 High Street North, for Mr. Parnacott; twenty garages, Ranelagh Road, for Mr. W. Sellar; factory, Barking Road, for Mr. W. Allison; two houses, office and repair shop, Watson Avenue, for Mr. J. W. Lohden; factory, Katherine Road, for Mr. R. C. Turner Gordon; alterations to bioscope box, Boleyn Cinema, Barking Road, for Mr. C. Masey, F.R.I.B.A.; store, Dersingham Avenue, for Mr. T. W. Bedford, architect; additions, rear of Boleyn Castle Green Street, for Mr. T. H. B. Scott, architect.

Plans passed by the HACKNEY B.C.: Buildings, 1–8A Anton Street, for Mr. C. G. Smith; building, Swinnerton Street, for Messrs. T. W. Heath, Ltd.; additions, Mentmore Manufacturing Co.'s premises, Tudor Grove, for Mr. C. A. Aish; building, Warneford Street, for Mr. E. Murray; offices and stores, Mare Street, for Messrs. Whinney, Son and Austen Hall, on behalf of the Gas Light and Coke Co., Ltd.; offices and stores, Landfield Street, Rendlesham Road, for Messrs. Bethell, Swannell and Durnford, on behalf of the Gloy and Empire Adhesives, Ltd.; addition, City of London Wood Wool Company, Ltd., Plover Street, Hackney Wick, for Messrs. Barrett and Power; factory, 92 Southgate Road, for Messrs. A. J. King, Ltd.; lock-up shops, Mare Street, Essex Street, for Mr. J. Morris; alterations and additions, Kenninghall Cinema, 229 Lower Clapton Road, for Messrs. Kingsland and Sons; chapel, St. Mary's Home, Stamford Hill, for Mr. G. H. Burghes.

Plans passed by the LEWISHAM B.C.: Additions, Tranquil Vale, for Messrs. Street and Co., Ltd.; fourteen houses, "The Drive," Lawrie Park Avenue, for Messrs. C. H. Gibson, Ltd.; ten houses, Winsford Road, for Messrs. Middletons (Builders), Ltd.; school, Riddons Road, for Messrs. J. W. Ellingham, Ltd.; 187 houses, Bellingham Farm Estate, for Messrs. A. J. Clock, Ltd.; extension to Catford Cricket Club pavilion, Selworthy Road, for Messrs. Durling and Sons; school, Downham Estate, for Mr. J. G. Stephenson; additions, St. John's Vicarage, Bromley Road, for Messrs. Bowman and Sons; two houses, Winsford Road, for Messrs. Middletons; twelve houses, Pascoe Road, for Mr. W. F. Ball; additions, 229 to 303 Hither Green Lane, for Messrs. Kinnear, Moodie and Co.; two houses, Honor Oak Park, for Mr. E. C. Christmas; new premises, 122 to 126 High Street, for Messrs. Bovis, Ltd.; twenty houses, Daneby Road, for Mr. J. Watt; ten houses, Winsford Road, for Messrs. Middletons (Builders), Ltd.; eleven houses, Netherby Road, for Messrs. Wm. Wilmot, Ltd.



Group of shops, Stainbeck Lane, Leeds. Designed by Victor Bain. View showing rear of premises. The building comprises a group of three separate shops provided with the necessary living accommodation.



Group of shops, Stainbeck Lane, Leeds. Designed by Victor Bain. View of main front. The buildings are of brick, faced with snecked rubble stone and white cement. The roof is covered with tiles.

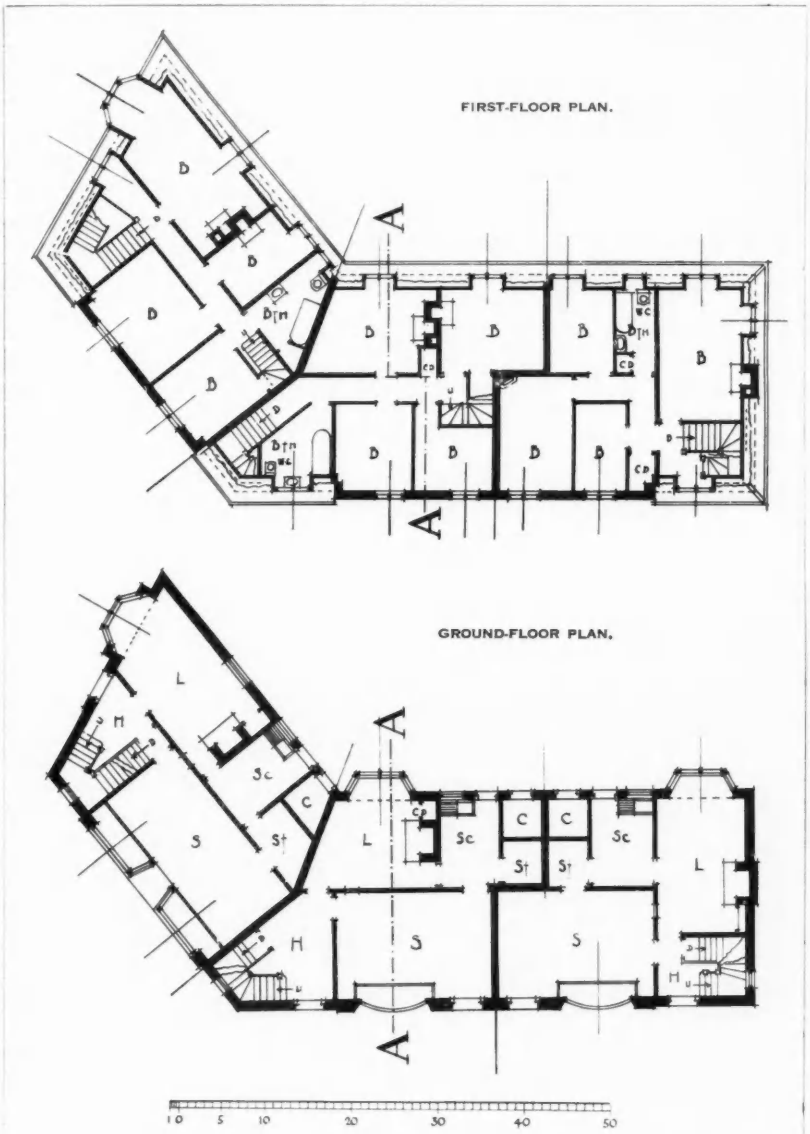
Plans passed by the ILFORD Corporation: Twelve houses, Woodford Bridge Road, for Mr. T. Anders; two houses, Gyllyngdune Gardens, and four houses, Levett Gardens, for Messrs. J. W. Moore and Sons, Ltd.; eleven houses, Beehive Lane, for Mr. W. Longworth; houses and garages, Collinwood Gardens and Glenwood Gardens, for Mr. A. Smith; twenty-eight houses, Canterbury Gardens, for Mr. A. P. Griggs; four houses, Ashurst Drive, for Mr. H. Needham; nine houses, Redbridge Lane and Highcliffe Gardens, for Mr. T. Anders; new roads and sewers, Loxford Lane Estate, for Mr. F. G. Faunch; new road and sewers, rear of "Plough" public-house, Ilford Lane, for Messrs. B. Bailey & Co.; thirty-six houses, Charter Avenue, for Mr. J. W. Lohden; six houses, Chepstow Crescent, for Mr. W. H. Lewis; four houses, Grove Gardens, for Mr. P. Triplete; six shops, Belgrave Road, for Messrs. Haines and Warwick, Ltd.; alterations, "Green Gate" public-house, Horns Road, for Mr. W. Stewart; 173 houses and garages, Meadway, Tavistock Gardens and Ashburton Avenue, for Mr. J. Aldridge; four houses, Horns Road, for Mr. A. Melbourne; three shops and houses, Cranbrook Road, for Mr. G. Hamblin Fox; Lancashire boiler factory, Grove Road, for Mr. F. Smith; shop and offices, Station Approach, for Mr. Henry Tanner; three factories, Grove Road, for Mr. W. C. Young; bank premises, Granbrook Road, for Mr. G. Hamblin Fox; rebuilding "Red House" public-house, Redbridge Lane, for Mr. T. F. Ingram; seven houses, Grove Road, for Mr. W. G. Young; new roads and sewers, Hedgemans Hall Estate, for Messrs. Rawlins, Culver & Co.; boiler house, factory, Grove Road, for Messrs. H. Chappel & Co., Ltd.; three houses, Heath View Gardens, Barley Lane, for Mr. T. Anders.

SOUTHERN COUNTIES

The Brighton Education Committee has obtained sanction to borrow £27,850 for the erection of an elementary school at MOULSECOOMB.

The BRIGHTON Corporation is to reconstruct 193–4 Western Road at an estimated cost of £10,600, provision being made for shop premises with flats above.

The BRIGHTON Corporation has approved the layout for the erection of seventy-two parlour-type houses on a portion of the Bevendean Estate, at an estimated cost of £38,200.



Group of shops, Stainbeck Lane, Leeds. Designed by Victor Bain. Ground- and first-floor plans. Reference: B=*bedroom;* BTH=*bathroom;* C=*coal;* CD=*cupboard;* H=*hall;* L=*living-room;* S=*shop;* ST=*store;* SC=*scullery. Photographs of the building are reproduced on page 510.*

The BRIGHTON Corporation Works Committee has considered plans prepared by the borough engineer of a proposed main drainage scheme for the Rottingdean area (exclusive of Ovingdean) at an estimated cost of £28,000. The borough engineer has been authorized to carry out the work by direct labour.

Plans passed by the HERNE BAY U.D.C.: Eight houses, Burton Downs, for the Herne Bay Estates, Ltd.; house, Oxenden Park Drive, for Mr. H. Pettman; six houses, Albany Drive, for Messrs. J. Howell and Son; bungalow, Central Avenue, for Messrs. Goodwin and Russell; house, Station Road, for Mr. L. W. Pinnick; additions and alterations, "Boscombe Tower," for Major Guy Rice; two houses, Selsea Avenue, for Mr. C. H. R. Griggs; eight houses, Grand Drive, for Mr. T. S. Pettman; additions, 78 High Street, for Mr. A. W. Sutton; house, Oxenden Park Drive, for Messrs. G. R. Brown and Sons.

Plans passed by the GRAVESEND Corporation: Two houses, Portland Avenue, for Mr. Sandford; shop and house, Kitchener Avenue, for Mr. S. Bridger; boiler-house, coal bunker, fan-house and chimney, at Clifton Marine Parade, and pump-house at Campbell Road, for the Imperial Paper Mills, Ltd.; house, St. James's Avenue, for Mr. T. Bennett; road, off Park Avenue, for Mr. T. Bennett, on behalf of Messrs. R. Hopkins and Sons; house, New House Lane, for Mr. G. E. Clay; house, Albion Terrace, for Mr. E. H. Morris; two houses, North Ridge Road, for Mr. E. H. Morris.

Plans passed by the BEXHILL Corporation: House, Watermill Lane, for Mr. G. H. Treacher; house, South Cliff, for Mr. W. D. Key; house, St. John's Road, for Mr. F. M. Coxworthy; house, Ninfield Road, for Mr. W. A. Hall; bungalow, Mayo Lane, for Mr. F. A. Grove; bungalow, Pebsham Lane, for Mr. H. J. Richardson; house, Peartree Lane, for Mr. J. H. Lye; three houses, Peartree Lane, for Messrs. Norman Smith and Son; house, Cooden Drive, for Messrs. Tubbs and Messer; house, Cooden Drive, for Mr. J. E. Maynard; bungalow, Terminus Avenue, for Mr. J. E. Maynard; two houses, Mitten Road, for Mr. A. J. Sheather; house, Richmond Grove, for Mr. W. J. Harrington; conversion of 26 Sea Road into shops for Messrs. Bainbridge and Son; house, Barnhorn Road, for Mr. J. E. Maynard; bungalow, Barnhorn Road, for Messrs. Callow and Callow; four bungalows, The Byeway, for Mr. G. E. Matthews; house, Kewburst Avenue, for Mr. G. P. Bishop; bungalow, Pebsham, for Mr. E. Bunce.

Plans passed by the GUILDFORD Corporation: Two houses, Grantley Road, for Mr. W. J. Piner; house, Weston Road, for Mr. H. B. Heath; nurses' dining-room, Royal Surrey County Hospital, for the Hospital Committee; ten garages, Epsom Road, for Mr. Bennett Andrews; four houses, Grantley Road, for Mr. W. R. Stirling; addition to printing works, Castle Street, for Messrs. Mills and Sons, Printers, Ltd.; house, Ganghill Copse Estate, for Capt. F. B. Baker; house, Harvey Road, for Mr. Cecil Gould; four houses, Woking Road, for Messrs. Frampton and Co.; laundry, Ludlow Road, for the Royal Surrey County Hospital; five shops, High Street, for Mr. F. Scott; reconstruction of premises, 119 High Street, for Messrs. Russell and Bromley, Ltd.; alterations and additions, Quarry Street, for Messrs. Chas. Holden's, Ltd.; alterations, 92B High Street, for Mr. G. A. Perridge; alterations and additions, 56 and 57 Quarry Street, for Messrs. Capron and Sparkes; new premises, Stoke Fields, for Haydon Furnishing Co.

Plans passed by the BRIGHTON Corporation: Five shops, Mafeking Road and Ladysmith Road, for Mr. Charles Blaker; ten garages and store, rear of Ashdown Road, for Mr. W. E. Goddard; offices, workshops, etc., Briston Gardens, for Messrs. James Bodle, Ltd.; alterations, 140 Marine Parade, for Kemp Town Brewery; improvements, Sussex Square, for the trustees of St. Mary's Hall; workshop, 2, 3, 4 and 5 Dorset Street, for Messrs. F. T. Wilson and Sons; alterations, 36 London Road, for Mr. Harry Leslie; alterations and additions, 20 Denmark Terrace, for Mr. Ernest Davies; two houses, Windlesham Road, for Mrs. S. H. Carter; four houses, Stanmer Park Road, for Messrs. George Willis and Paris; six houses, Withdean Crescent, for Messrs. Arthur Ticehurst and Co.; alterations and additions, St. Stephen's School, Borough Street, for Messrs. Bensley and Co., Ltd.; five houses, Hartington Road, for Mr. G. Goble; two bungalows, Elder Row, for Mr. R. Mitchell; five houses, Hertford Road, for Braybons, Ltd.; cinema, restaurant, etc., 75–79 East Street, for Associated British Cinemas, Ltd.; two bungalows, Elder Row, for Messrs. R. Mitchell and Sons; twenty-two flats, Ladysmith Road, for Mr. George Ayling.

MIDLAND COUNTIES

The STOKE-ON-TRENT Education Committee has obtained sanction to borrow £28,916 for the erection of new schools at Meir.

The STOKE-ON-TRENT Education Committee has obtained sanction to borrow £13,810 in connection with proposed extensions to the North Staffordshire Technical College.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_2	Barnard Castle	N.E. Coast	1 6	1 1½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EAST-BOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_2	Gillingham	S. Counties	1 5	1 0½
*A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_2	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_2	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6	*Lime, grey stone, per ton*	£2	11	6
Thames ballast, per yd.	0	10	0	*Mixed lime mortar, per yd.*	1	6	0
Pit gravel, per yd.	0	15	0	*Dampcourse, in rolls of 4½ in., per roll*	0	2	6
Pit sand, per yd.	0	12	6	DO. 9 *in. per roll*	0	4	9
Washed sand, per yd.	0	13	0	DO. 14 *in. per roll*	0	7	6
Screened ballast or gravel, add 10 per cent. per yd.				DO. 18 *in. per roll*	0	9	6
Clinker, breeze, etc., prices according to locality.				BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
Portland cement, per ton	£2	8	0	DO. in cement do., per rod	34	10	0
Lias lime, per ton	2	0	0	DO. in stocks, add 25 per cent. per rod.			
Sacks charged extra at 1s. 9d. *each and credited when returned at* 1s. 6d.				DO. in blues, add 100 per cent. per rod.			
Transport hire per day:				DO. circular on plan, add 12½ per cent. per rod.			
Cart and horse £1 3 0 *Trailer*	£0	15	0	DO. in backing to masonry, add 12½ per cent. per rod.			
3-ton motor lorry 3 15 0 *Steam roller*	4	5	0	DO. in raising on old walls, etc., add 12½ per cent. per rod.			
Steam lorry, 5-ton 4 0 0 *Water cart*	1	5	0	DO. in underpinning, add 20 per cent. per rod			
EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube	0	3	0	HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
Exceeding 6 ft., but under 12 ft., add 30 per cent.				BEDDING plates in cement mortar, per ft. run	0	0	3
In stiff clay, add 30 per cent.				BEDDING window or door frames, per ft. run	0	0	3
In underpinning, add 100 per cent.				LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
In rock, including blasting, add 225 per cent.				CUTTING do. in old walls in cement, per ft. run	0	0	4
If basketed out, add 80 per cent. to 150 per cent.				CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
Headings, including timbering, add 400 per cent.				TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6	DO. 14 ft. by 9 in. do., per ft. run	0	6	0
SPREAD and level, including wheeling, per yd.	0	1	6	FLAUNCHING chimney pots, each	0	2	0
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6	CUTTING and pinning ends of timbers, etc., in cement	0	1	0
TRIMMING earth to slopes, per yd. sup.	0	0	6	FACINGS fair, per ft. sup. extra	0	0	3
HACKING up old grano. or similar paving, per yd. sup.	0	1	3	DO. picked stocks, per ft. sup. extra.	0	0	7
PLANKING to excavations, per ft. sup.	0	0	5	DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.				DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
IF left in, add to above prices, per ft. cube	0	2	0	TUCK pointing, per ft. sup. extra	0	0	10
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1	WEATHER pointing, do. do.	0	0	3
DO. 6 in. thick, per yd. sup.	0	2	10	TILE creasing with cement fillet each side, per ft. run	0	0	6
PUDDLING, per yd. cube	1	10	0	GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0	DO. 1½ in., per yd. sup.	0	6	0
DO. 6-2-1, per yd. cube	1	18	0	DO. 2 in. per yd. sup.	0	7	0
DO. in upper floors, add 15 per cent.				If coloured with red oxide, per yd. sup.	0	1	0
DO. in reinforced-concrete work, add 20 per cent.				If finished with carborundum, per yd. sup.	0	0	6
DO. in underpinning, add 60 per cent.				If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
LIAS-LIME CONCRETE, per yd. cube	£1	16	0	Jointing new grano. paving to old, per ft. run	0	0	4
BREEZE CONCRETE, per yd. cube	1	7	0	Extra for dishing grano. or cement paving around gullies, each	0	1	6
DO. in lintels, etc., per ft. cube	0	1	6	BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9	ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0	DO. vertical, per yd. sup.	0	11	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9	SLATE DAMP COURSE, per ft. sup.	0	0	10
				ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
				DO. SKIRTING, 6 in.	0	0	11
				BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
				DO. DO. 3 in.	0	6	6
				BREEZE fixing bricks, extra for each	0	0	3

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½
STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.

Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	0
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	0	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*

N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£13	0	0
Countess	25	0	0
Duchess	32	0	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	9
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard

Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	4
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	3
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	9
DO. framed in floors, roofs, etc., per ft. cube	0	5	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

(continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 9½d. *per hour;* MATE, *do.* 1s. 4d. *per hour;* ERECTOR, 1s. 9½d. *per hour;* FITTER, 1s. 9½d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	18	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FLATING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1s. 9½d. *per hour;* MATE OR LABOURER, 1s. 4½d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	6
DO. *3 in., per yd.*	0	1	9
DO. *4 in., per yd.*	0	2	6
Gutter, 4 in. H.R., per yd.	0	1	0
DO. *4 in. O.G., per yd.*	0	1	4
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE OR soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 9½d. *per hour (plus allowances in London only);* LABOURER, 1s. 4d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 8d. *per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅜ in., per ft.	0	0	6½
DO. *½ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet. 21 oz.	0	0	11
DO. 26 oz	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span 1s. 6d. to 2s. per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0
Glazing only, polished plate, 6½d. to 8d. per ft. according to size.			

PAINTER AND PAPERHANGER

PAINTER, 1s. 8d. *per hour;* LABOURER, 1s. 4d. *per hour;* FRENCH POLISHER, 1s. 9d. *per hour;* PAPERHANGER, 1s. 8d. *per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	3	4
DO., *boiled, per gall.*	0	3	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards. plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ⅛ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ¼ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			⅜ in.			½ in.		
Qualities	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, OCTOBER 9

UNIVERSITY OF LONDON, University College, W.C.1. Students assemble for evening courses in architectural design and in the architecture atelier. **5.45 p.m.**

THE ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. Continuation of Health Week until October 12.

THURSDAY, OCTOBER 10

BEDFORD COLLEGE, Regent's Park, N.W. Opening of Session.

UNIVERSITY OF LONDON, University College, W.C.1. Commencement of series of Thursday lectures on "The History of Decoration," by Professor Sir Flinders Petrie. **2.30 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Origins of Architecture: I.—Greek." By Cecil Hallet, B.A., F.S.A. **12 noon.**

R.I.B.A., 9 Conduit Street, W.1. Meeting of Science Standing Committee.

FRIDAY, OCTOBER 11

THE ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. Sessional meeting in the Council Chamber, The Castle, Shrewsbury, when discussions will take place on: "Some Notes on Recent Bridges over the River Severn"; "Reconditioning of Houses under the Housing (Rural Workers) Act, 1926"; "The Scope of a House Property Management Department." The chair will be taken by H. D. Searles-Wood, F.R.I.B.A. **4.30 p.m.**

INSTITUTE OF METALS. At University, Sheffield (Applied Science Department). "Some Notes on the Selection of Suitable Metals to Resist Corrosion." By Mr. F. C. Robinson. **7.30 p.m.**

SATURDAY, OCTOBER 12.

Sunrise, 6.17. Sunset, 5.15.

THE ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. Sessional meeting as on October 11.

NATIONAL CONFERENCE FOR THE PRESERVATION OF THE COUNTRYSIDE. At the Queen's Hotel Pavilion, Ambleside. 10 a.m. "A Policy for the Preservation of Lakeland." Speakers: G. L. Pepler, Prof. P. Abercrombie, and Ewart James. 8 p.m. "Safeguarding the Beauty of the Lake District as a National Heritage." Speakers: Sir Charles Trevelyan, Prof. P. Abercrombie, Clough Williams-Ellis, and Sir Fabian Ware. **10 a.m. and 8 p.m.**

SUNDAY, OCTOBER 13.

ROYAL SOCIETY OF ARTS, John Street, W.C.2. L.C.C. Hornimtan Museum, Forest Hill, S.E. "Mammoth and Man." By Prof. J. R. Ainsworth Davis. **3.30 p.m.**

MONDAY, OCTOBER 14

R.I.B.A. 9 Conduit Street, W.1. Exhibition until October 22 of Designs of Students exempted from the R.I.B.A. Intermediate and Final Examinations.

THE INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. "Vacuum Cleaning," by F. F. Powell. This meeting will be held at the Borough Polytechnic, Borough Road, Southwark, S.E.1. **7 p.m.**

THE ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Messrs. Waygood-Otis, Falmouth Road, S.E.1. Meet at Main Entrance, nearest station the Borough (Underground). **6.15 p.m.**

TUESDAY, OCTOBER 15

UNIVERSITY OF LONDON, University College, W.C.1. "The History of Greek Sculpture." By Professor Bernard Ashmole. **3 p.m.**

THE LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to Vanburgh Castle, Royal Air Force Memorial School, Blackheath, S.E.3. Applications for tickets to be made to the Secretary of the Society. **2.30 p.m.**

WEDNESDAY, OCTOBER 16.

R.I.B.A., 9 Conduit Street, W.1. Till Friday, October 18. Statutory Examinations for Certificates of Competency to act as District Surveyor under the London Building Acts and Building Surveyor under Local Authorities. **6.15 p.m.**

THURSDAY, OCTOBER 17

ARCHITECTURE CLUB. At the London School of Economics. Supper Discussion. Report as to arrangements. **5.45 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. **12 noon.**

FRIDAY, OCTOBER 18

TRADES TRAINING SCHOOLS. Presentation of Prizes at the Carpenters' Hall, London Wall, E.C.2. **8 p.m.**

THE LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to Carlyle's House and Museum, 24 Cheyne Row, S.W.3. **2.30 p.m.**

SATURDAY, OCTOBER 19

Sunrise 6.30. Sunset, 5.0.

THE INSTITUTION OF HEATING AND VENTILATING ENGINEERS. Visit to Mount Pleasant Letter Office: Conveyors *v.* P.O. Tube Railway. Time and place of meeting to be arranged.

THE ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Royal Veterinary College, Camden Town. Meet at Main Entrance. **2.45 p.m.**

MONDAY, OCTOBER 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. 12 noon. "Architecture." By L. O. Faraker. 3 p.m. **12 noon.**

UNIVERSITY OF LONDON, University College, W.C.1. "The Elizabethan House." By Arthur Ashmole. **2 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Council Meeting. **4.30 p.m.**

TUESDAY, OCTOBER 22

THE INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Dinner at Engineers' Club, Manchester. **7 p.m.**

WEDNESDAY, OCTOBER 23

THE LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visits to Carreras Tobacco Factory, Mornington Crescent, N.W.1. At 11 a.m., 2 p.m., and 3.30 p.m. Only fifteen persons can attend in each party. Please state which time is preferred. **11 a.m., 2 and 3.30 p.m.**

THURSDAY, OCTOBER 24

THE INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. Inaugural address by Col. Sir T. F. Purves, O.B.E. (President). **6 p.m.**

THE LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visits to St. Paul's Cathedral. Canon Alexander will speak on "How St. Paul's has been Preserved." Meet inside main entrance. **2.30 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Origins of Architecture: II.—Roman." By Cecil Hallet, B.A., F.S.A. **12 noon.**

R.I.B.A., 9 Conduit Street, W.1. Meeting of Literature Standing Committee.

THE ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Ladies' visit to Messrs. Waring and Gillow's Showrooms, Oxford Street, W. **2.45 p.m.**

FRIDAY, OCTOBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chinese Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

SATURDAY, OCTOBER 26

R.I.B.A., 9 Conduit Street, W.1. Exhibition until November 2 of Designs of Students of Schools of Architecture recognized for exemption from R.I.B.A. Intermediate Examination.

WEDNESDAY, OCTOBER 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

FRIDAY, NOVEMBER 1

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Gothic Woodwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

THE INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Meter and Instrument Section Meeting. **7 p.m.**

SATURDAY, NOVEMBER 2

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section—Sculpture." By T. F. WILSON, F.R.S.A.I. **3 p.m.**

MONDAY, NOVEMBER 4

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last date for entry for R.I.B.A. Final Examination.

ROYAL INSTITUTE OF BRITISH ARCHITECTS, 9 Conduit Street, W.1. Inaugural Meeting. The portrait of Mr. Walter Tapper, A.R.A., F.S.A., painted by Sir William Orpen, R.A., will be presented to the Royal Institute, and the Medals and Diploma for a London building completed between 1926–1928 will be presented to Messrs. Easton and Robertson, FF.R.I.B.A.

THE INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Informal Meeting. **7 p.m.**

THURSDAY, NOVEMBER 7

THE INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting.

FRIDAY, NOVEMBER 8

THE ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street. S.W.1. "Modern Incandescent Lighting in Kinema Studios," by W. H. Villiers and S. G. Double. **7 p.m.**

SATURDAY, NOVEMBER 9

Sunrise, 7.6. Sunset, 4.21.

MONDAY, NOVEMBER 11

THE INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Informal Meeting. **7 p.m.**

THURSDAY, NOVEMBER 14

THE ARCHITECTURE CLUB. Dinner at the Savoy Hotel.

FRIDAY, NOVEMBER 15

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. "Romance of Lead in Industry." By E. Holden, F.COLL.H. **3 p.m.**

MORLEY COLLEGE, Westminster Bridge Road, S.E.1. "Housing." By E. D. Simon, M.P. **8 p.m.**

SATURDAY, NOVEMBER 16

Sunrise, 7.19. Sunset, 4.10.



INSIDE SIR CHRISTOPHER WREN'S ORIGINAL MODEL OF ST. PAUL'S

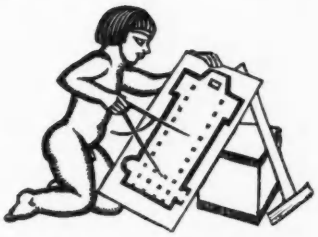
After three years' work, the restoration of Wren's original model for St. Paul's Cathedral is now complete, and this model, which is said to be the architect's favourite design, and has stood for so long outside the Trophy Room near the West Gallery of St. Paul's, has been moved into the Trophy Room itself, where it now stands on an entirely new base, some five feet in height, arranged so as to admit of easy movement.

The model was constructed by Wren himself of oak and lime-wood, and this interior view, taken from the equivalent of eye level, shows something of its beauty and the great attention to detail displayed by Wren in all his work. Records show that the work was actually started in 1674; but Wren experienced great difficulty in satisfying his patrons, and, although approved by the King, this design was later abandoned in favour of that of the present structure.

Remarkable skill has been displayed in the restoration of the model. Carvings, capitals, and mouldings have been entirely replaced, window openings have been filled with leaded glass, and the whole model lighted from within. It is to a scale of ½ inch = 1 foot.

[*See also the photograph of the exterior on page 520.*]

THE ARCHITECTS' JOURNAL



WEDNESDAY, OCTOBER 9, 1929

THE JUGGERNAUT OF MODERNISM

"Vnto this Pagod . . . . doe belong 9,000 Brammines, or Priests, which doe dayly offer Sacrifice vnto their great God Iaggernat . . . . And when it [the chariot] is going along the City, there are many that will offer themselves a sacrifice to this Idoll."

—W. BRUTON (1638) in *Hakluyt's Voyages.*

AS the protagonists of what is known as the "Modernist" movement in architecture achieve greater success and increasing prominence in the public eye, they tend to become ever bolder in their utterances; and in some ways this is all to the good. They must not be surprised, however, if these utterances are subject to the scrutiny of their professional *confrères*, who will naturally wish to form an exact estimate of the new architectural policy which is being formulated.

When, for instance, Mr. Joseph Emberton recently granted an interview to a newspaper reporter, in which he gave an exhibition of what in pugilistic circles is known as "taking off the gloves," his remarks seemed vested with a significance greater than that which attaches to the more cautious propaganda of some of his colleagues in the Modernist movement. It is necessary, of course, to allow for the possibility of a reporter's error; but Mr. Emberton was credited with saying, among other startling things, that in his opinion Waterloo Bridge represented past beauty and, as it had already shown its inadequacy by breaking down, it should immediately be demolished in order to make room for a structure expressing modern efficiency.

If it is true that so influential an apostle of Modernism as Mr. Emberton can view without a vestige of regret the disappearance of Waterloo Bridge, it seems necessary to define once more some of the obvious implications of the term "architect." We may all agree with Mr. Emberton that an architect is a person whose primary duty is to design and supervise the erection of new buildings, and if these buildings are not only new but also beautiful, he has deserved well of his generation.

But an architect is not merely a practitioner in one particular cultural field; he should be a leader and guardian, and should feel under a special obligation not only to create new architectural beauty himself, but, wherever possible, to save from destruction such architectural beauty as has been created by others. And the public, although we are frequently told it is ignorant in matters appertaining to architecture, is yet quick to discern the distinction between practitioners who acknowledge a duty in this respect and those who do not, and the latter will justly be accused of impiety.

Thus, if there is any architect living today who actually rejoices at the prospect of Waterloo Bridge being pulled down, he will show worldly wisdom in concealing his true sentiment, for there are occasions when hypocrisy becomes a virtue.

This much may be said even by those who sympathize with the Modernist movement and wish it well. Very many ugly buildings are to be found in our English towns, and we should all like to see them replaced by others not so ugly. There is surely ample scope for architectural talent here.

While, however, Modernists and Traditionalists may argue heatedly as to the right method of designing buildings in the future, it would be an agreeable symbol of the unity of the architectural profession if all could combine in helping to protect from unnecessary destruction buildings of acknowledged beauty which were designed in the past.

With much that Mr. Emberton said concerning the need for straightforwardness in design and for getting rid of affectations which are still too common in buildings of to-day, most people will find themselves in agreement. It is not always recognized, however, that the Modernists and Traditionalists do not together comprise the whole body of architects, but that there exists a large and important middle party anxious to do justice to both, who are inclined to resent it if the one school seeks to win a cheap victory over the other. And it is well to remember that the Traditionalists do not form a homogeneous class, but contain among their number critics quite as capable as the most ardent Modernist of pillorying the architectural abuses of which Mr. Emberton complained in his recent interview; while it is also pleasant to find that the Modernists also are on occasion capable of paying backhanded compliments to one another.

What we require is a good-tempered judgment which can compare the best of what either school has to offer.



"Le poete et Pegase": one of the decorative allegories sculptured by the late Emile Antoine Bourdelle for the Theatre des Champs-Elysees, Paris.

NEWS & TOPICS

CHARING CROSS BRIDGE

MR. J. H. THOMAS, speaking to the Labour Conference last week, made the important announcement that the plans for the new Charing Cross Bridge would not be ready until next May or June. The matter has been debated for so many years that few people will be surprised at this few months' extra delay. The Government, only a week after its accession to office, called the parties together and said that their differences had got to cease; and hence the London County Council and the Southern Railway has at last devised a scheme satisfactory to them both. A number of critics, however, have questioned the desirability of putting this scheme into execution until there has been an opportunity of making certain improvements in it; and it is probable that when the subject again comes before Parliament various objections will be raised to the proposed layout of roads in the vicinity of the new Southern Railway station; and these objections will need to be carefully examined.

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While, of course, the L.C.C. is a publicly elected body and its decisions upon a matter of public interest should claim the respect of everyone who is trained to accept both the theory of local government and its practical implications, we may yet feel grateful that in this particular instance it will ultimately be left to Parliament to reflect the national will with regard to the future treatment of so important a centre of the Metropolis. Representatives of the L.C.C. have indeed conferred for many months with chief officials of the Southern Railway, but the plan which their experts and advisers have jointly agreed upon is open to such serious criticism that the case for a public competition to determine the designs both for the new Charing Cross bridge and the layout of its approaches seems unanswerable. Such a competition need not entail the entire scrapping of the scheme which will be presented for the consideration of Parliament next session. Certain elements in this may be accepted as the basis of all future proposals; but before taking an architectural decision of such importance we have surely the right to expect that the very finest professional talent should be employed in the solution of the complex problems involved, even if the holding of such a competition resulted in a further delay of six months.

EMILE ANTOINE BOURDELLE

Bourdelle, who died of heart disease at Le Vesinet, a suburb of Paris, on October 1, aged sixty-eight, was, with the exception of Maillol, Mestrovic, and Milles, the most famous living sculptor. Born in the same year as Maillol, who happily survives him, posterity is scarcely likely to accord him an equal rank, although his work was of an infinitely wider range. Bourdelle made an early reputation, which he maintained throughout his life. While still a young man he experimented in an astonishing variety of mediums and manners. He was a very fine draughtsman. Some years ago he had to give up clay modelling owing to rheumatism, and took to watercolours and pastels, of which he has painted some thousands. He also painted portraits and composed sonnets, besides illustrating books and writing critical essays on art. In England, where he often exhibited at the Royal Academy, he was best known as a portraitist. Among his most celebrated busts are those of Baudelaire, Ingres, Madame Jules Michelet, the Belgian poet, Verhaeren, the architect Auguste Perret, Anatole France, Carpeaux, Rudyard Kipling, and Sir James Frazer, the author of "The Golden Bough." He modelled over twenty different interpretative studies of Beethoven's head. The Italian Government paid him the rare honour of inviting him to execute his own bust for the Uffizi. His most notable bas-reliefs are probably "L'Epouvante de la Guerre" and "La Sagesse Active." Bourdelle exhibited all over the world; a comprehensive display of his work was held last November in the new Palais des Beaux-Arts at Brussels.

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Emile Antoine Bourdelle was born at Montauban, the birthplace of Ingres, in the Tarn-et-Garonne, in 1861.

His father was a cabinet-maker, though one of his uncles was a stone-cutter. His boyhood was spent in Languedoc, working on the land. At the age of sixteen he went to Toulouse, where he remained nine years, studying at the local art school and winning many prizes. In 1885 he went up to Paris with a scholarship at the Beaux-Arts. Here he entered Falguière's atelier, but remained only three months. Bourdelle never competed for the *Prix de Rome*. It is to his credit that he neither admired the Ecole nor flattered its taste. His first exhibited work was "Adam After the Fall," which he finished the same year that he came to Paris. Hitherto he had been to some extent influenced by Carpeaux, Dalou, and Rude. He now came under the dominating influence of Rodin's dramatic naturalism — a phase that lasted till 1900. Bourdelle worked as Rodin's pupil for fifteen years, doing much of his master's carving, including that of the marble bust of Madame Rodin. Rodin genuinely appreciated his work and praised it generously, considering him as an "éclaireur de l'avenir," destined to hand on the torch of his own tradition. In 1900 Bourdelle completed the memorial of his native town, Montauban, to its citizens who had fallen in the Franco-German war of 1870–71, which Rodin praised as an "epic."

THE SECOND PHASE

Bourdelle now entered his second phase and became an ardent student of ancient art. Thenceforward he was at different times influenced by the sculptors of the cathedrals of Chartres and Rheims, the Assyrians, the Egyptians, and the Ægean Greeks of the so-called "archaic" period. Rodin often called him "a Greek of the French Midi" (Bourdelle married a Greek wife), but it must be confessed that this Meridional proved himself a rather superficial, and even a "slick," and occasionally sentimental, Hellene. Much of Bourdelle's earlier work had been done in relation to architecture. In 1912 he was invited to decorate the new Théâtre des Champs-Elysées, which is by many considered his finest achievement. Auguste Perret, the architect, made it a stipulation that his figures should form an integral part of the structure, and that the frieze must be executed in those parts where, like the metopes of ancient temples, "architecture had no function." Bourdelle executed the whole of the sculpture in this theatre, including the Allegories of Music, the Gods and Muses, and the Drama and Comedy, in Pyrenean marble, and the coloured bas-reliefs. He also painted the thirty large frescoes direct on to the plaster. To this period belongs his powerful "Hercules the Archer," which is now in the Luxembourg. With it may be mentioned the "Penelope Awaiting Ulysses," "The Triumph of Aphrodite," and "The Dying Centaur." Perhaps the best and most typical of his works is "Rodin Working at his *Porte de l'Enfer*."

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After the war Bourdelle carried out several important commissions on the heroic scale. The earliest of these, chronologically, is the "Epopée Polonaise" (1917), by some considered his masterpiece, a memorial to the Polish poet Adam Mickiewicz, standing fifty feet in height. Still better known is the colossal rhetorical monument to General Alvear (1920). This equestrian statue, rising sixty-five feet from its plinth, has been erected in one of the principal squares of Buenos Aires, where it looks thoroughly at home. "La Vierge à l'Offrande" (1921), better known as "La Vièrge des Vosges," is a figure of the Madonna and Child twenty feet high perched on a spur of the mountains commanding a pass near Niederbruck which was recently inaugurated by M. Poincaré. This Virgin of the Vosges is decidedly architectural in feeling and Romanesque in inspiration. A much nobler work is the memorial in Chauvigny stone at Monceau-les-Mines to the miner soldiers of the Département of the Saone-et-Loire who fell in the last war.

"HE IMPOSED A SENSE OF ARCHITECTURE ON HIS WORK"

That time-honoured and hackneyed phrase of the artist's obituary, "He lived for art," can be applied to Bourdelle in simple justice, even though much of his ideal and impersonal art was not of the very highest kind. His work was execrated by some, extravagantly trumpeted by others. He has been taunted with being crude, superficial, imitative, and even sentimentally representational; and he has also been acclaimed, though not with very much critical insight, as the world's greatest living sculptor. Always an eager seeker after new forms, his rather primitive exuberance and his hierophantic spirit at times made him appear something of a poser. This he was not, for he tried consistently, though not always effectually, to banish "literature" from his compositions. As Mr. H. Bartle-Cox said in the course of a couple of very carefully documented articles on Bourdelle's work contributed to THE ARCHITECTS' JOURNAL in 1922, "he imposed a sense of architecture on his work." Bourdelle had the same power of analytical intimacy as Rodin. Bergson said of his figures that "each part contains a whole." Bourdelle's influence can be clearly seen in Epstein, who has consistently, and, on the whole, not too successfully, imitated some of his later mannerisms. For long he refused those discredited decorations which the Republic showers on the most subaltern French talents, but he was ultimately prevailed upon to accept one of the higher classes of the Legion of Honour.

"THESE TECHNICAL FETISHES"

The correspondence in the Press about the electric power standards grows apace. Sir Philip Dawson in *The Times* of the 26th ult. replied to Professor Patrick Abercrombie with some very feeble generalities, but with not a word about the two specific schemes, the one in Sussex, the other in the Lake District. Sir Philip has the most perfect confidence in the Electricity Commissioners, who "are the only body which possesses reliable and complete information of all the local conditions." I should like to know which of his "ablest experts" has studied "all the local conditions" of South Down scenery, and thereafter has planned a route for rusty standards across it; or which of his "highly qualified technical advisers" is trying to improve Lakeland with steel towers.

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It is good news that the South Downs scheme is being held in suspense for the final veto, as I hope, of the Minister of Transport; and next, may he put a cross against the Keswick scheme, and call for particulars of new routes in Wales, on whose mountain skylines even a tree may seem impertinent, much more a tin technical fetish. All this bother with scientists gives me to think—"Are there any miracles of science?" If so, why are not these miraculous powers used to devise an economical

laying of cables below ground? Here is a problem for the National Physical Laboratory.

HOW ST. PAUL'S HAS BEEN SAVED

Last week, for the benefit of members of the St. Paul's Lecture Society, Canon Alexander recapitulated, in anticipation of the reopening of the Cathedral next June, the progress of the work of restoration of the fabric of the building, which has occupied no less than seventeen years. He did much more: he outlined the history of the great church, rehearsing the difficulties with which Sir Christopher Wren was confronted, and touched upon the effects of the modern traffic developments which, twenty years ago, placed its stability in jeopardy. According to the opinion of an eminent engineer, the work was then only taken in hand just in time. It seems that another restoration, in miniature, has, of late years, been proceeding side by side with it, namely, that of Wren's original model for the Cathedral, which, as readers of this page and of the frontispiece will see, presents interesting differences from the design as eventually carried out. In the model, which is to a scale of half an inch to the foot, there are considerable variations, particularly in details of the dome.

ANOTHER DOME CHAIN FOR ST. PAUL'S

Incidentally, the news that another chain, double the weight of the one already inserted in the outer drum of St. Paul's Cathedral, will be used to strengthen the dome comes as something of a surprise. The new chain will weigh 60 tons and will take six months to manufacture in Sheffield. It will be somewhat longer than the existing chain and will be used at a wider part of the dome. As the St. Paul's Commission first decided to complete the restoration without reinforcement of any kind, it indicates a sincere change of mind that so much is being added to the building. One wonders why so large a reinforcement should be made at the end of the scheme. Is this a surrender to the critics who advocated extensive reinforcement?

BATTERSEA POWER STATION

Erection of the new power station at Battersea, which has been the subject of prolonged controversy and, I may add, strenuous opposition on the part of THE ARCHITECTS' JOURNAL, is likely to be undertaken in the near future. The promoters of the project now hold out the hope that by the time the building is completed means will have been found to dispose of the noxious fumes by a new process of combustion. It is a consummation devoutly to be wished; indeed, the only condition upon which the Battersea scheme can be tolerated. Obviously it is far more important to tackle the smoke nuisance at its source than to attempt to segregate factories in certain areas. For even if we banish them to the country, where the smoke cannot ruin the stonework of valuable buildings, it may cause damage to plants and lessen the attractiveness of the countryside.

★

What seems to be needed here is a more generous endowment for research in this particular subject and, indeed, a stricter measure of State supervision in order to compel factory owners to utilize the resources of modern science for the purpose of preventing the atmosphere being poisoned in the manner threatened by this and other proposed new power stations. Considering that the uncontrolled emission of large volumes of smoke from the funnels of merchant ships during the war proved to be the surest means of revealing to the enemy their exact location, and was thus responsible for the loss of hundreds of vessels, one might have expected that for reasons of national safety this problem of smoke combustion would by now have been taken seriously in hand. Here is one more matter to which the new Government may with advantage give its attention and thus serve the sciences both of shipbuilding and of architecture at the same time.

ASTRAGAL



Wren's model of St. Paul's Cathedral: the exterior. Some particulars of the model, the restoration of which has been proceeding concurrently with that of the Cathedral itself, are given under the picture of its interior reproduced as frontispiece.



The old Manor House of Sturry Court (left) which is being utilized as the Headmaster's house, and part of the new building (right) which will eventually be connected with it. At present a temporary covered way is provided.

NEW JUNIOR SCHOOL AT CANTERBURY

King's School, Milner Court, Sturry

DESIGNED BY TATCHELL AND WILSON

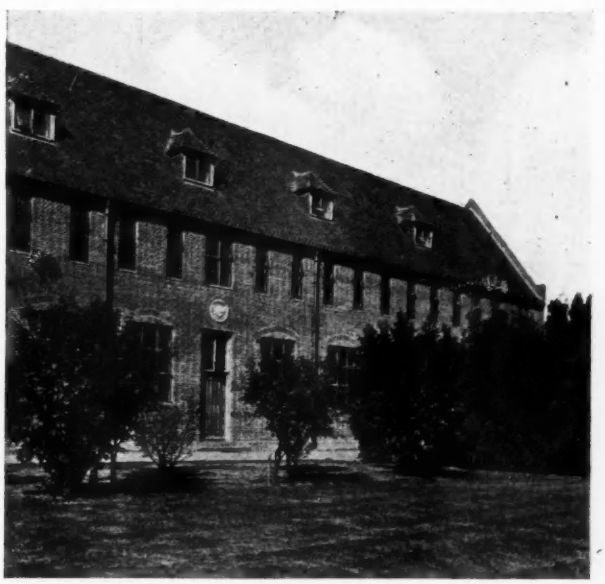
ON Wednesday, July 18, 1928, Lady Milner laid the foundation stone of the new building at Milner Court, Sturry, Kent, the formal opening of which was performed on Saturday last, Oct. 5, by Mr. Rudyard Kipling, and to which the Junior King's School, Canterbury, was transferred at the end of September. Milner Court, until quite recently, was known as Sturry Court, and appears to have belonged originally to the Abbey of St. Augustine, which was founded in A.D. 605. There is a Domesday Record in 1080 that Sturry, together with a church and mills, was then held by the Abbot. Distinctive features of the old structure still exist, and what remains of the sixteenth-century manor house is now to be the headmaster's house.

The manor house was occupied by the last Abbot after the dissolution of the monasteries. After his death it passed into private ownership and many parts were pulled

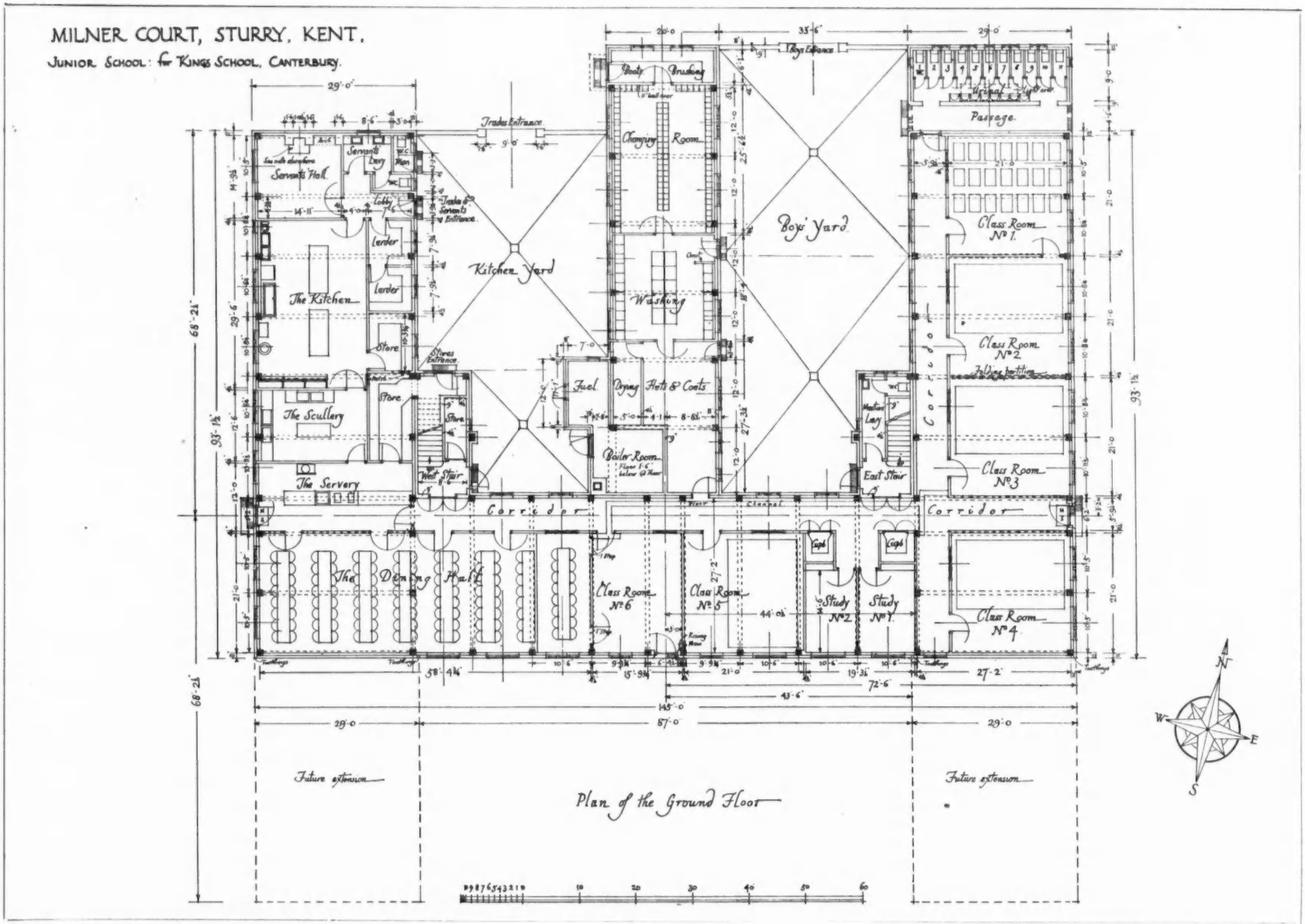
[*Continued on page 527*]



The old gateway, built of sixteenth-century brick, which has recently been restored at the base of the arch. Through it can be seen the avenue of pleached limes leading to the main entrance.



The east elevation and main entrance. As can be seen here and in the upper photograph, the bricks and tiles used are in harmony with the old Manor House, both as regards texture and colour.



Milner Court, Sturry, Kent.] [*By Tatchell and Wilson.*

The architects' plan of the ground floor of the new school building, showing future extensions in dotted lines. First- and second-floor plans are on page 524.

Milner Court, Sturry, Kent.] [*By Tatchell and Wilson.*

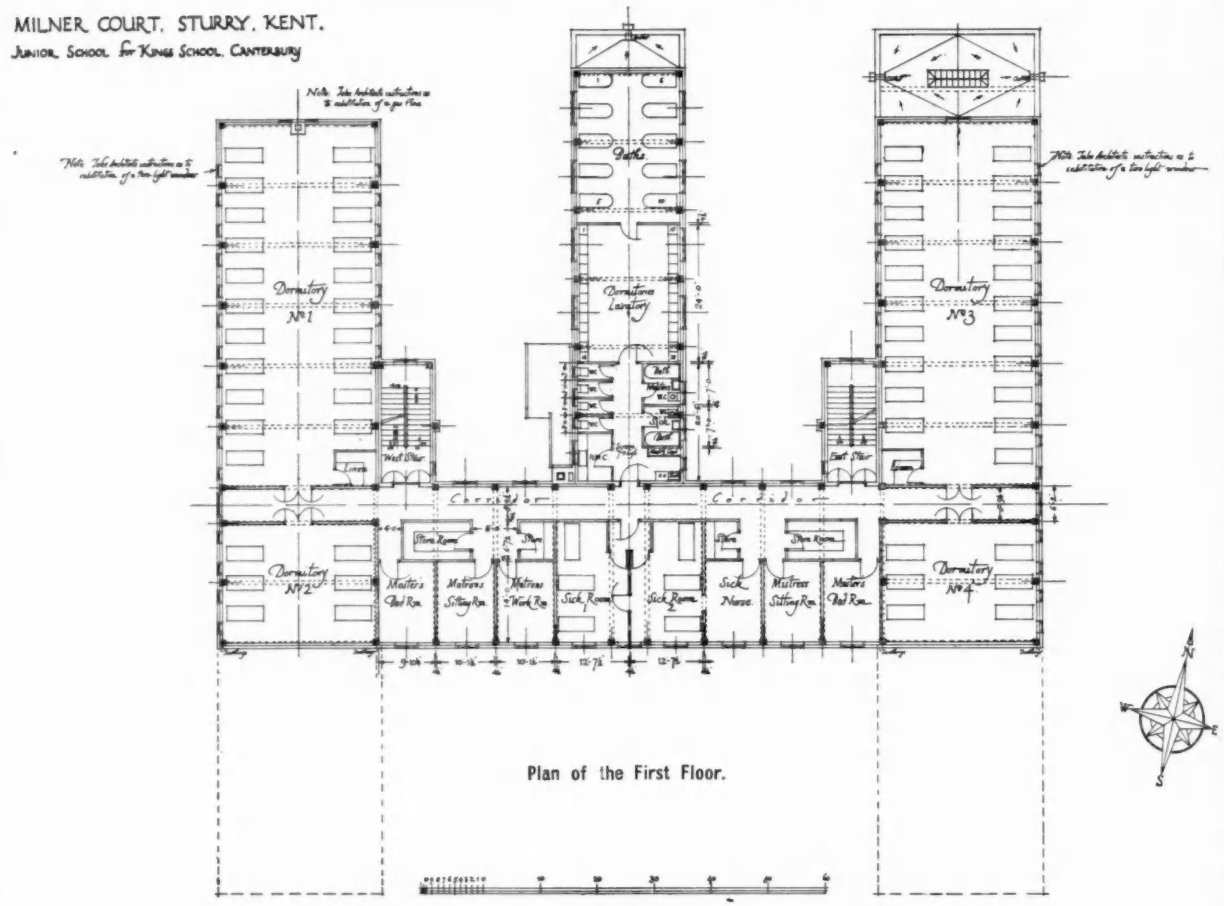
The architects' plan of the ground floor of the new school building, showing future extensions in dotted lines. First- and second-floor plans are on page 524.



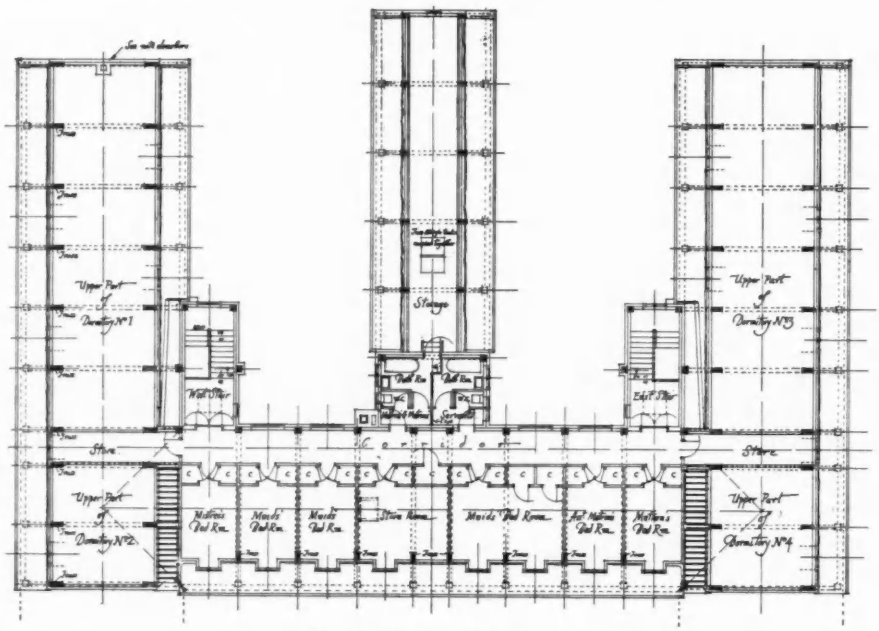
Milner Court, Sturry, Kent.] [*By Tatchell and Wilson.*

A general view of the north elevation from the kitchen garden, showing the separate wings for classrooms, washing and changing rooms, and kitchen premises.

MILNER COURT, STURRY, KENT.
JUNIOR SCHOOL for KINGS SCHOOL, CANTERBURY



Plan of the First Floor.



Plan of the Second Floor.

Milner Court, Sturry, Kent.] [*By Tatchell and Wilson.*

The architects' plans of the first and second floors. The future extensions are indicated by dotted outlines; in the case o the second floor only a small portion is shown.

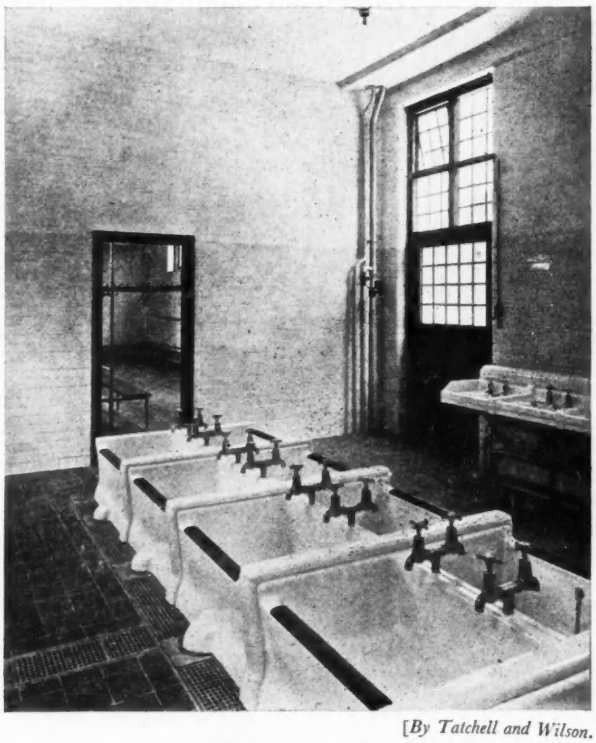


A typical dormitory, of which there are four. Ventilation has been arranged by a through current of air, windows being provided between each bed on opposite sides of the room and also in a dormered clerestory.



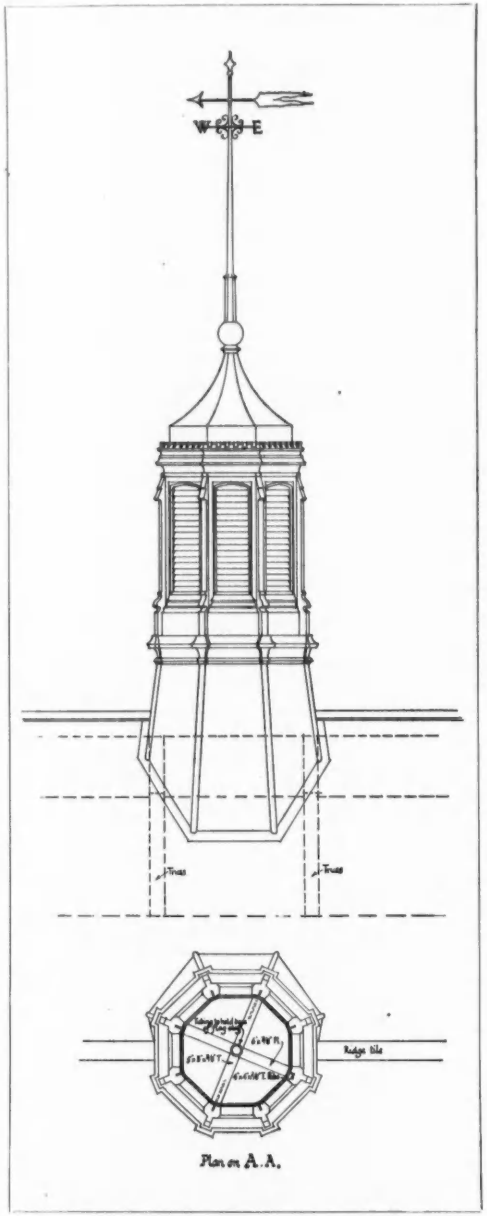
Milner Court, Sturry, Kent.]

Classrooms Nos. 2 and 3, which will not be divided until the day room in the south-east extension is built to release them for their designed use. The area of window glass is rather in excess of one-fifth the area of the floor space.

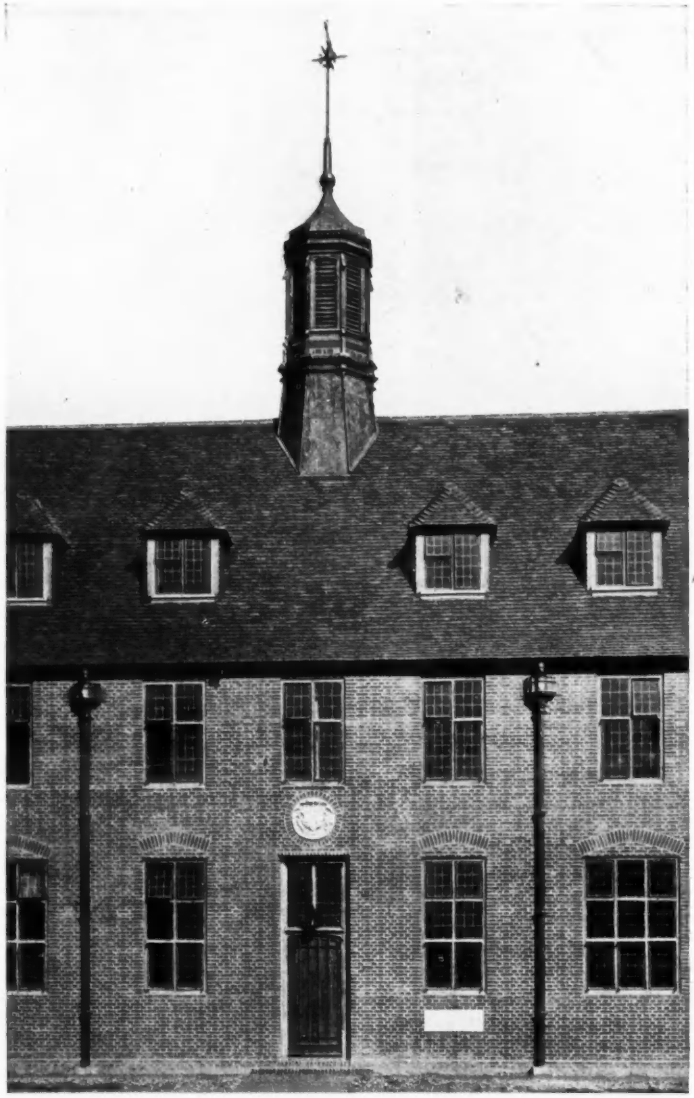


[By Tatchell and Wilson.

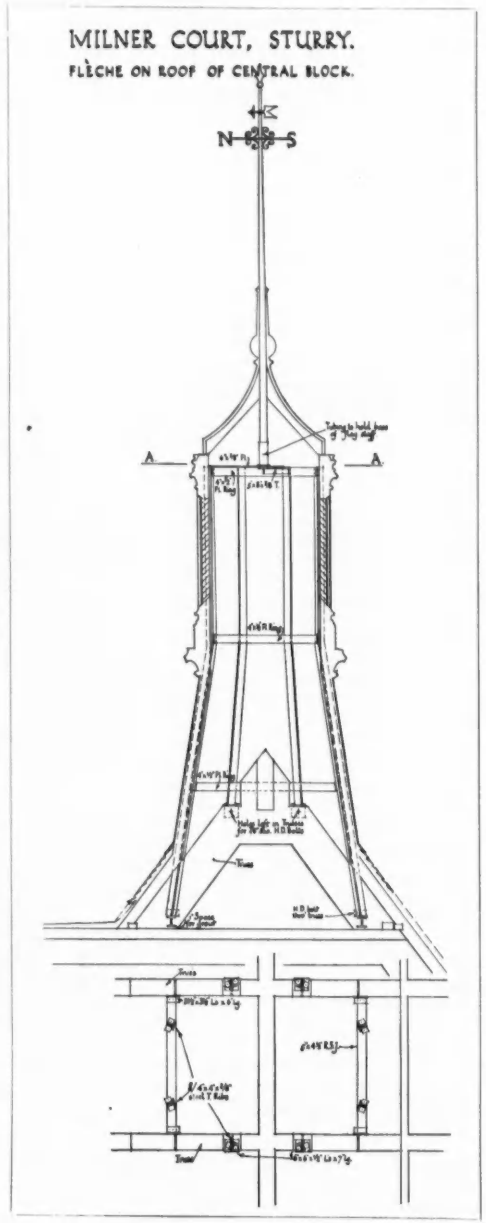
The ground-floor washing-room adjoining the changing-room, which is provided with ranges of basins and footbaths for the use of boarders and day boys after games and during the daytime.



Milner Court, Sturry, Kent.]



The south front, showing flèche and main entrance doorway; the drawings on either side give details of the flèche. The plan on the right shows the concrete trusses.



[*By Tatchell and Wilson.*

down and unsuitable additions were made. Eventually it was bought by Lord Milner, who spent some time in creating the beautiful gardens which are the admiration of all who see them today.

With the decision to move the school to Sturry, the problem to be solved was to provide economically, for the accommodation of boarders and day boys, a building that would be in harmony with the character of the existing buildings and erected without altering the gardens. It was finally decided that the only practical scheme would be to concentrate into one new building the accommodation required, leaving the manor house for the headmaster, maintaining unchanged, on account of its unique character, the fourteenth-century tithe barn, and utilizing the existing cottage as a master's house. The new building has been placed so as to be easily accessible from the headmaster's house.

The plan adopted for the new building is in the form of a letter H, the wings being north and south and the main block east and west. The east entrance is from the existing main avenue. A well-lighted and ventilated corridor running the length of the building provides access to the classrooms at the east end, the washing and changing-rooms in the centre, and the dining-hall, kitchen, and service at the west end. Sanitary accommodation is provided on the north side of the main block in a separate wing. On the first floor in the wings are four cross-lighted and ventilated dormitories, with the master's and matron's rooms in the central block. Staircases adjoining the wings at each end provide exits in case of fire.

Owing to lack of funds, the wings have not yet been completed. Eventually the dormitories will be extended on the first floor and on the ground floor. The south-east wing will then contain a day-room, the other wing the dining-hall; and the space in the main block will be used for increased classroom and other accommodation. The new building is of such proportions as to be in scale with the existing buildings, and the material used in its erection harmonizes both in colour and texture with the old work.

Classrooms have been provided at the rate of one for every twenty boys. Four classrooms occupy the east wing, and the remaining classrooms have a south aspect. Each classroom has been designed to take single desks occupying 3 ft. by 2 ft., leaving for the master $7\frac{1}{2}$ ft. between the front row of the desks and the wall. The windows have been distributed so as to light all the desks as evenly as possible and so that every boy has a left-hand light. The colour of the walls and ceilings has been carefully considered in relation to light. The dining-hall has been arranged on the basis of feeding 100 boys at the midday meal, thus including the day boys. Adjoining the dining-hall to the north are well-equipped servants' premises. There are four dormitories, with a space of 3 ft. between each bed, giving a floor area of about 70 superficial feet. Ventilation has been arranged by a through current of air, windows being provided between each bed. The whole of the cloak-room, changing-room, lavatory, and bathroom accommodation has been arranged in a sanitary wing on the north side of the central block, with accommodation for day use at the north of the east wing. The boot and brushing-rooms are at the north end of this sanitary wing.

As the headmaster will reside in the manor house and some of the assistant masters will be accommodated in a cottage in the grounds, staff accommodation is on a smaller scale than usual for a school of this size. On the ground floor two studies for masters have been arranged at the junction of the east wing with the central block so as to facilitate supervision. On the upper floors staff quarters have been placed in the main block between the two dormitory wings for easy administration. The rest of the staff accommodation is contained on the top floor. Here also are two rooms, in an isolated position, for music practice. No library has been provided until the extensions are built, nor has provision been made for a gymnasium or a big school, as the existing barn can be used for both these purposes. The building is finished internally without the use of plaster, the concrete being rubbed down to a smooth surface and distempered, in common with the brickwork, a light cream colour.



[By Tatchell and Wilson.

Milner Court, Sturry, Kent.]

The old tithe barn, which was built in the fourteenth century, probably as a granary, as seen from the Manor House. It is of a unique architectural character and will be used as the gymnasium and big school. It is one of the parts of Sturry Court which remains unaltered from the time of its being built. It was here that Mr. Rudyard Kipling delivered his address, when opening the school last Saturday.

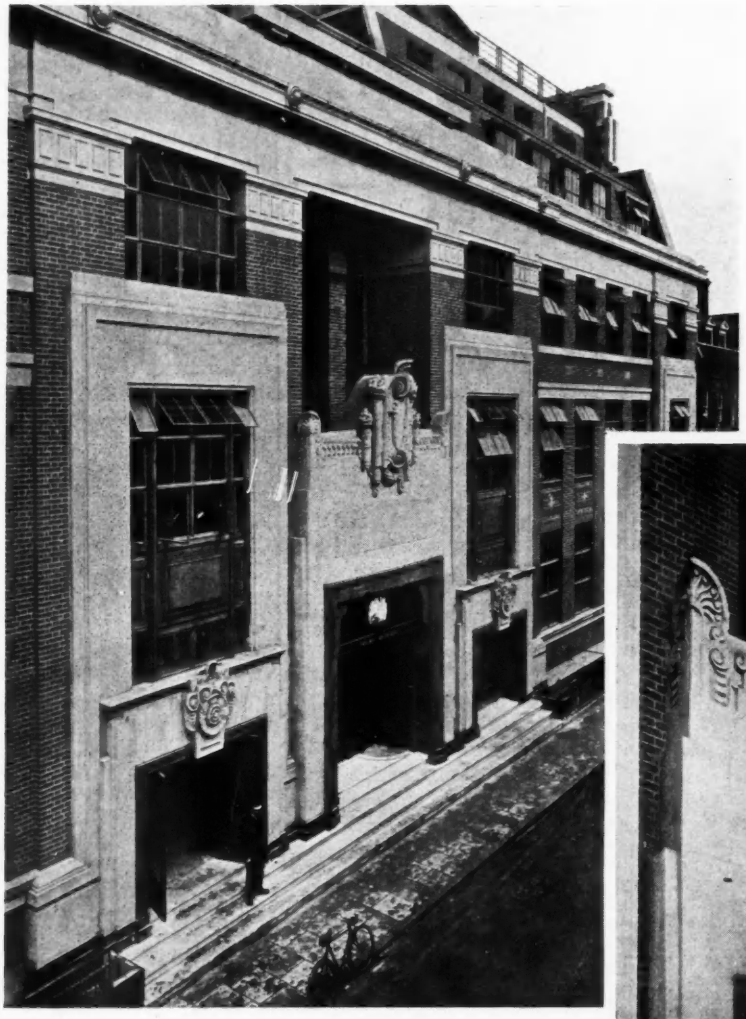
D

THE POLYTECHNIC EXTENSION:

Views of the New Building in Great Portland Street, W.1

DESIGNED BY F. J. WILLS

Her Majesty the Queen has graciously consented to open, tomorrow (October 10), the Polytechnic's new quarters. THE ARCHITECTS' JOURNAL *is pleased to be able to publish the first architectural photographs to be taken, together with the architect's drawings.*





A general view of the frontage to Little Titchfield Street, and, on a larger scale, the entrance doorway, with motto and device on the lintel, which is its central feature. The front is in brick and stone, with metal windows.

THE Polytechnic extension stands on a site between Little Titchfield Street and Riding House Street, off Great Portland Street, and provides accommodation for the headquarters of the Young Women's Institute, and for educational activities previously housed in various annexes and outlying buildings of the Polytechnic. It forms part of the great rebuilding and extension scheme decided upon by the Governors in 1926, which had for its main object the extension of the main building in Regent Street, completed in 1927, the erection of the present extension, and the addition of sixteen acres to the recreation ground at Chiswick. The scheme also provides for the further extension of the new building on the Great Portland Street front of the site; but this portion of the work cannot be undertaken until the existing leases expire in 1937. Eventually the main entrance will be erected on this front. For the time being the principal entrance is from Little Titchfield Street.

The plan and design of the new extension has been governed to a large extent by the comparatively narrow streets bounding the site, which prohibited the erection of a building of great height. The site, therefore, has been excavated to a depth of 40 ft. below pavement level. Although on the street front the building is only about 50 ft. high, the centre rises to a height of 92 ft. from

pavement level, making a total height from foundation to roof of 132 ft. By stepping back the building above cornice level and forming lighting wells on the street front, the lighting of the property on the opposite side of the street is not unduly obstructed.

Among the main features internally are the great and small halls. These are separated by a sound-proof screen, theatrical lighting, and can be used either for plays, as a cinema, or for choral entertainment. When the fire-proof screen dividing the two halls is lowered into the floor a large hall is formed capable of accommodating over a thousand persons. The rooms at balcony level are fitted with folding screens to enable them to be used for further seating when displays are taking place in the hall.

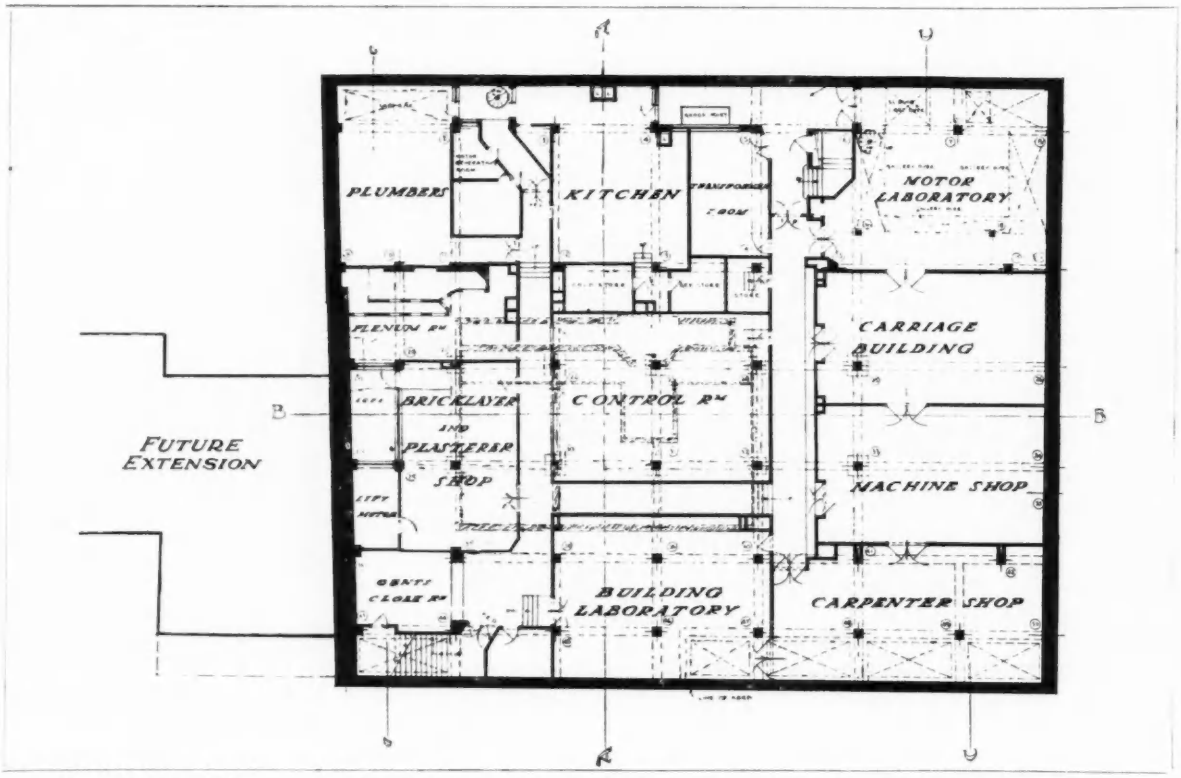


Polytechnic Extension, Great Portland Street, W.1] *[By F. J. Wills.*

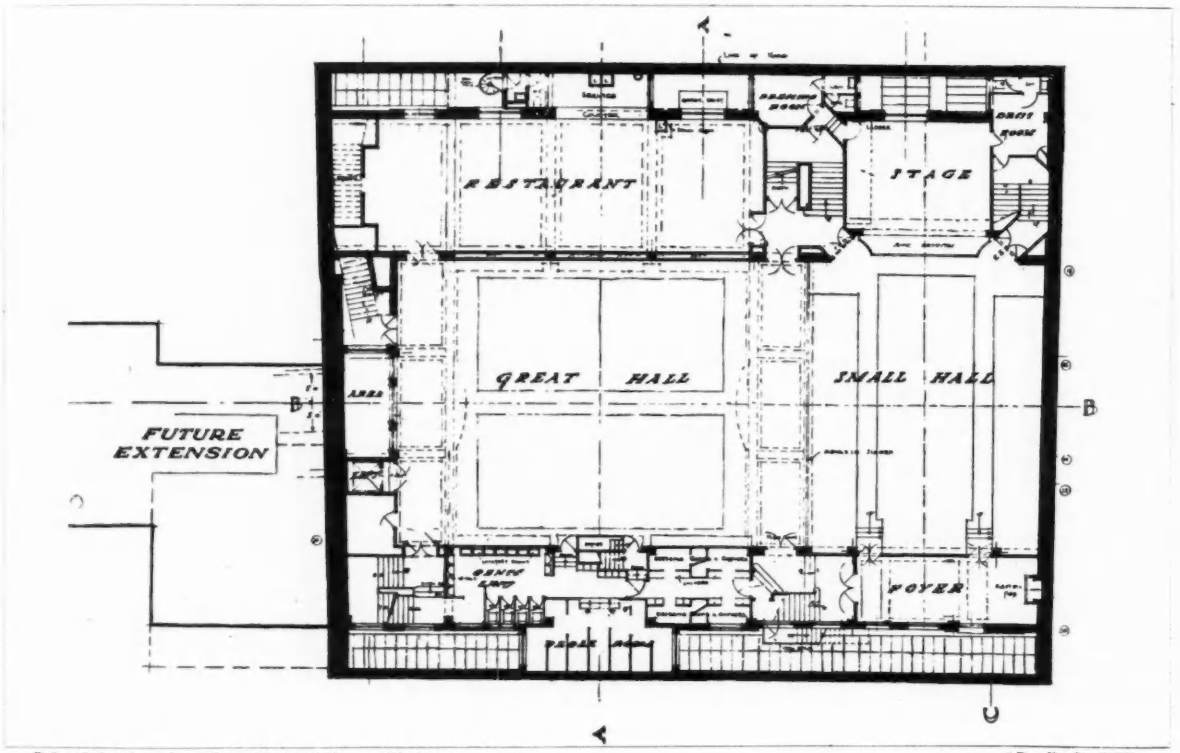
The main staircase, seen from the vestibule on the ground floor, to which entrance, direct from the street, is to the right in this picture. The doors seen on the left lead into the gallery overlooking the great hall. The vestibule is finished in marble; some of the fittings had yet to be placed in position when the photograph was taken.

weighing about five tons, which can be lowered or raised by hand. The great hall provides room for two badminton courts, and can be used separately as a gymnasium, the appliances for which can readily be removed. The small hall accommodates about 400 persons, and is equipped with a film-operating room, stage, dressing-rooms, and

The remainder of the building includes apartments for the Young Women's Institute, a restaurant, and classrooms, studios, and workshops for training students in commercial subjects, architecture, and craftsmanship—such as tailoring, hairdressing, and motor-body building—and domestic science and housewifery.



Basement plan. There are two floors below ground level. In the lowest are technical workshops, and also the boiler-room and the control-room from which heating throughout the building is regulated. A special account of the novel heating system appears on page 544.



Polytechnic Extension, Great Portland Street, W.1. [*By F. J. Wills.*

Lower ground-floor plan. The central feature here is the great hall, provides room for two badminton courts, and can be used separately as a gymnasium. A photograph appears on page 533. The hall extends through two floors. There are also a small hall, with stage, and a restaurant. The two halls are divided by a sound-proof screen which, although weighing about 5 tons, can be lowered by hand to convert them into one large hall capable of accommodating over a thousand persons.

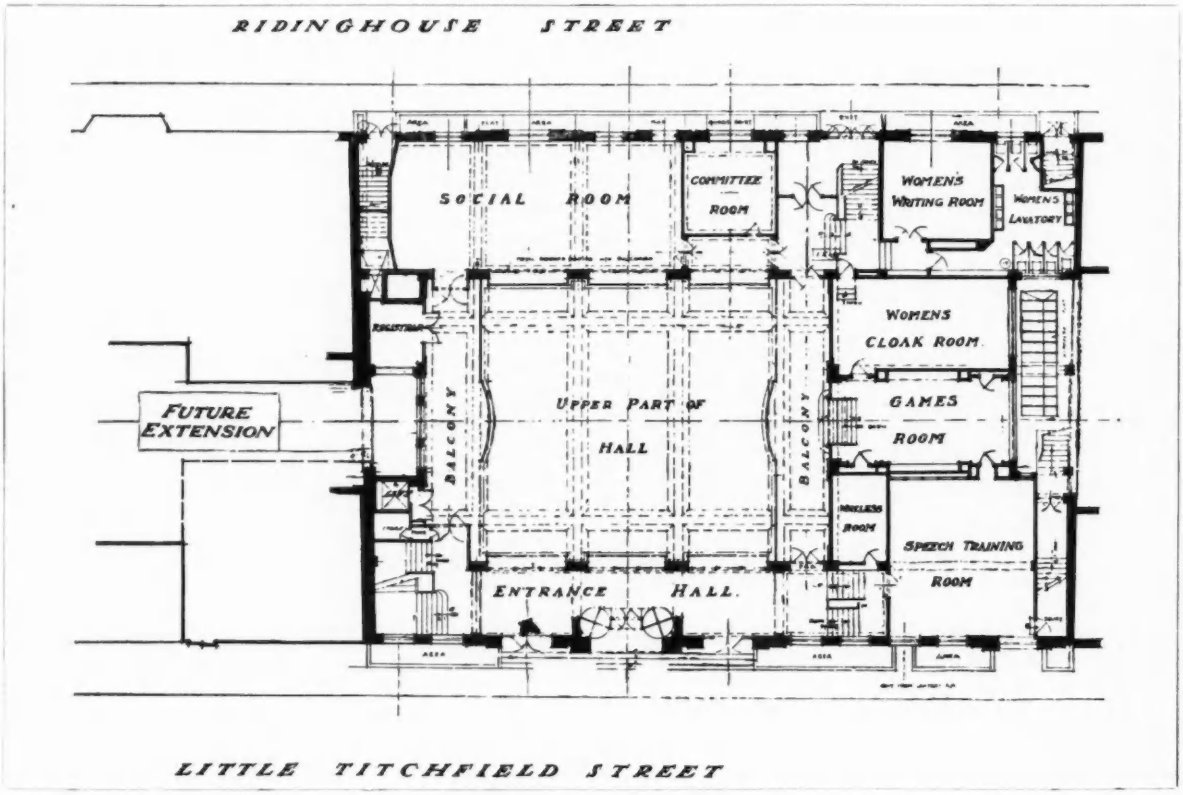


Life at the Polytechnic has an extensive social aspect, for which full provision is made. This is the ladies' club room in which hangs a portrait of Mrs. Quintin Hogg, wife of the founder of the institution. The screens on the left fold back to provide further seating when displays are taking place in the great hall.

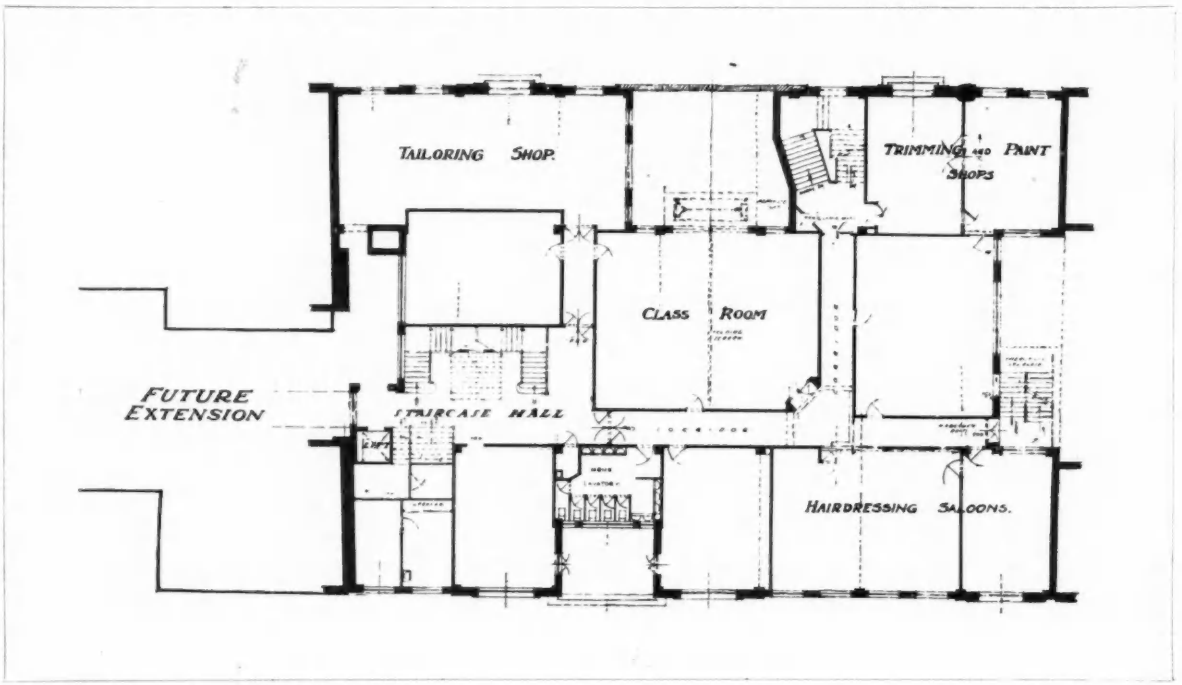


Polytechnic Extension, Great Portland Street, W.1. [*By F. J. Wills.*

The ladies' committee-room, which is panelled in oak with ebony inlay and has a clock built into the wainscot, gives further evidence of the policy of providing comfortable and elegant surroundings for relaxation as well as for utilitarian pursuits, in the furtherance of which the present large offshoot of the Regent Street Polytechnic has been undertaken.

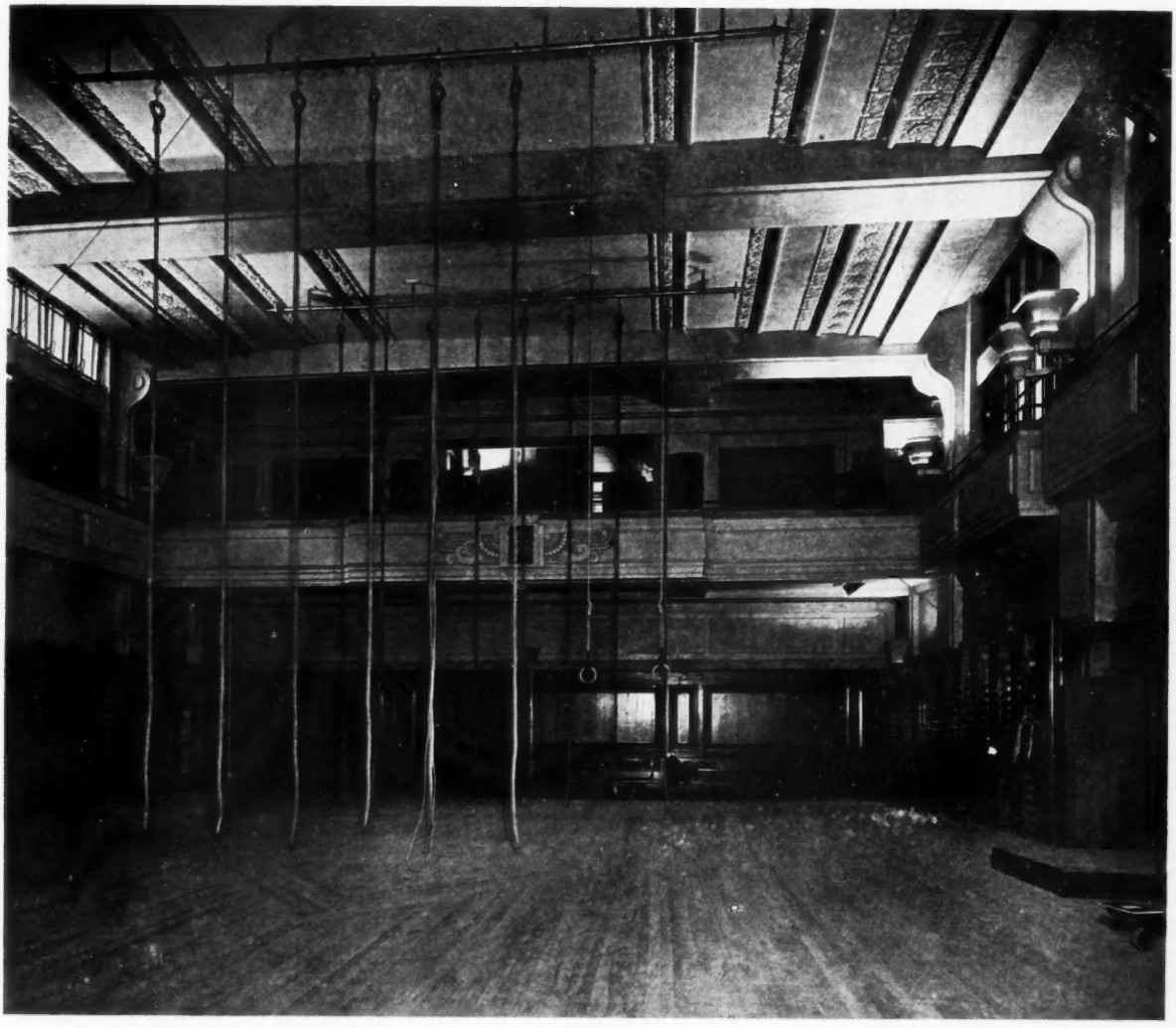


Ground floor plan. This shows the layout of the entrances from Little Titchfield Street and Ridinghouse Street. It will be observed that the scheme visualizes an extension towards Great Portland Street, where eventually the main entrance will be placed.

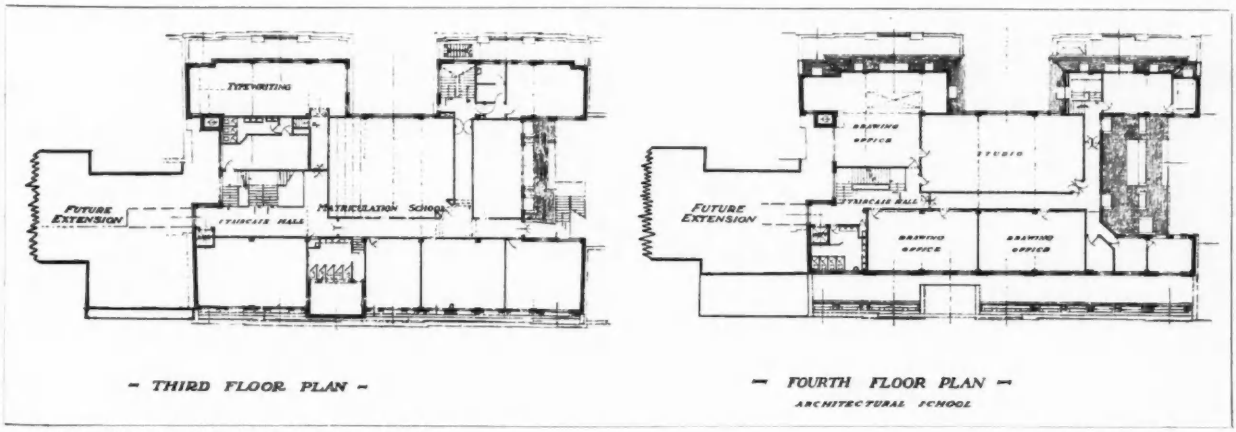


Polytechnic Extension, Great Portland Street, W.1. [*By F. J. Wills.*

First floor plan. The arrangement here is typical of the upper floors (see also the facing page), in which accommodation has been planned for workshops and classrooms for the study of skilled trades and professions, to provide instruction in which is the prime function of the organization.



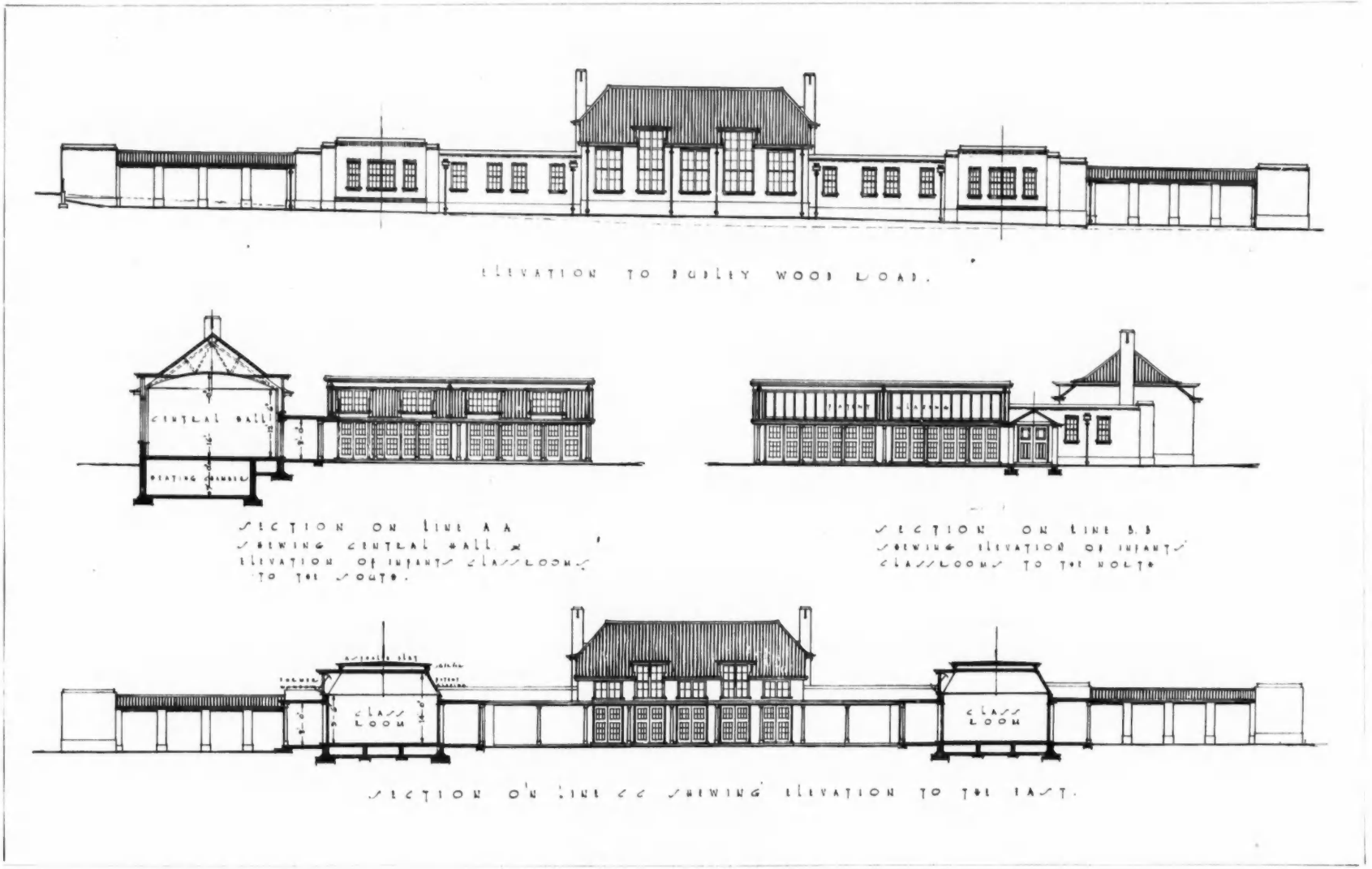
A corner of the gymnasium, which appears on the architect's plans as the great hall. It provides space for two Badminton courts and can be used separately as a gymnasium, the apparatus for which can be stowed away when formal occasions occur. There is an upper gallery for spectators.



Polytechnic Extension, Great Portland Street, W.1. [*By F. J. Wills.*

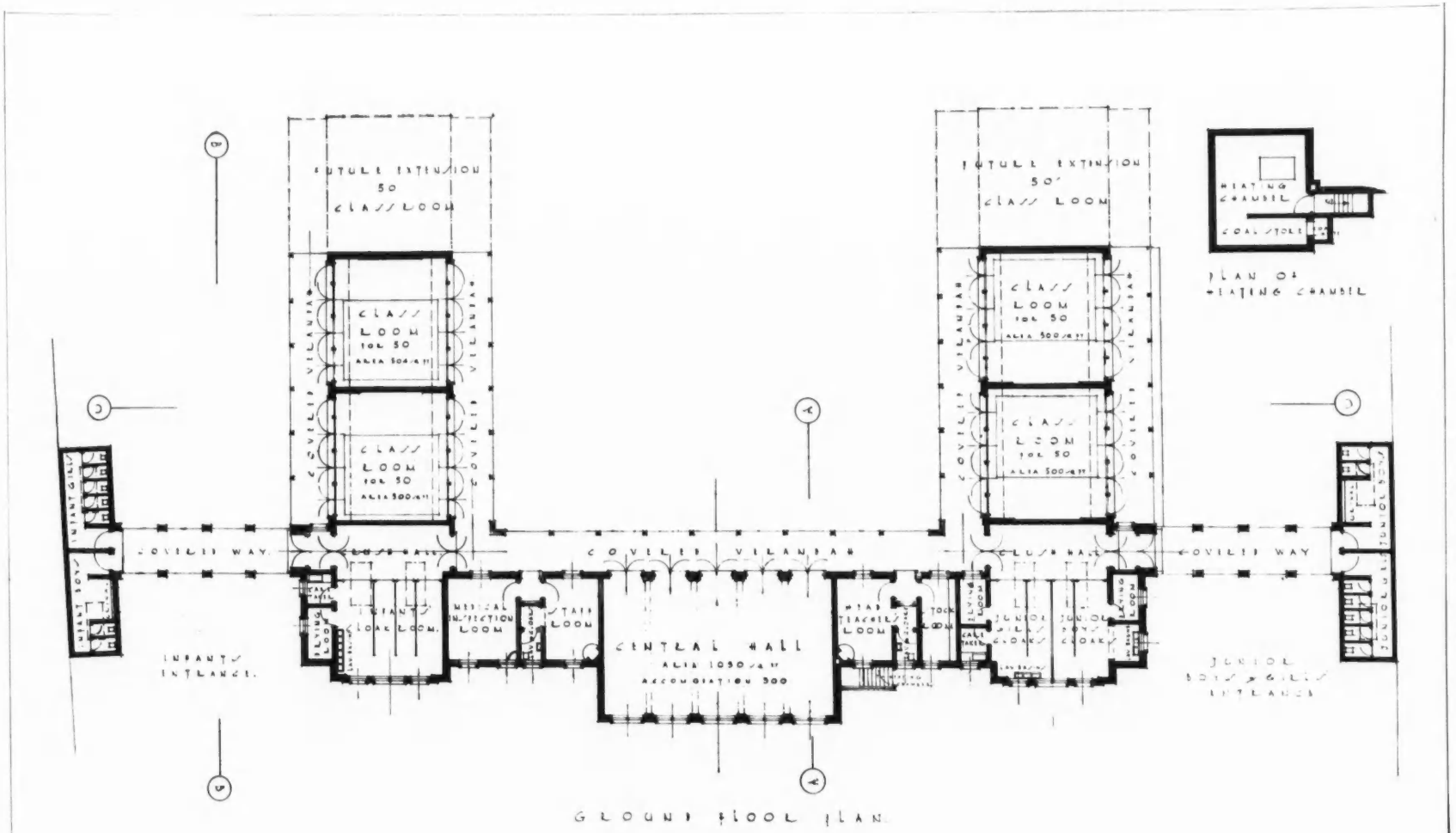
Third-floor plan, on a reduced scale; there are six stories. *Fourth-floor plan, showing three drawing offices and a studio.*

COMPETITION FOR NEW COUNCIL SCHOOL, DUDLEY, WORCESTERSHIRE.

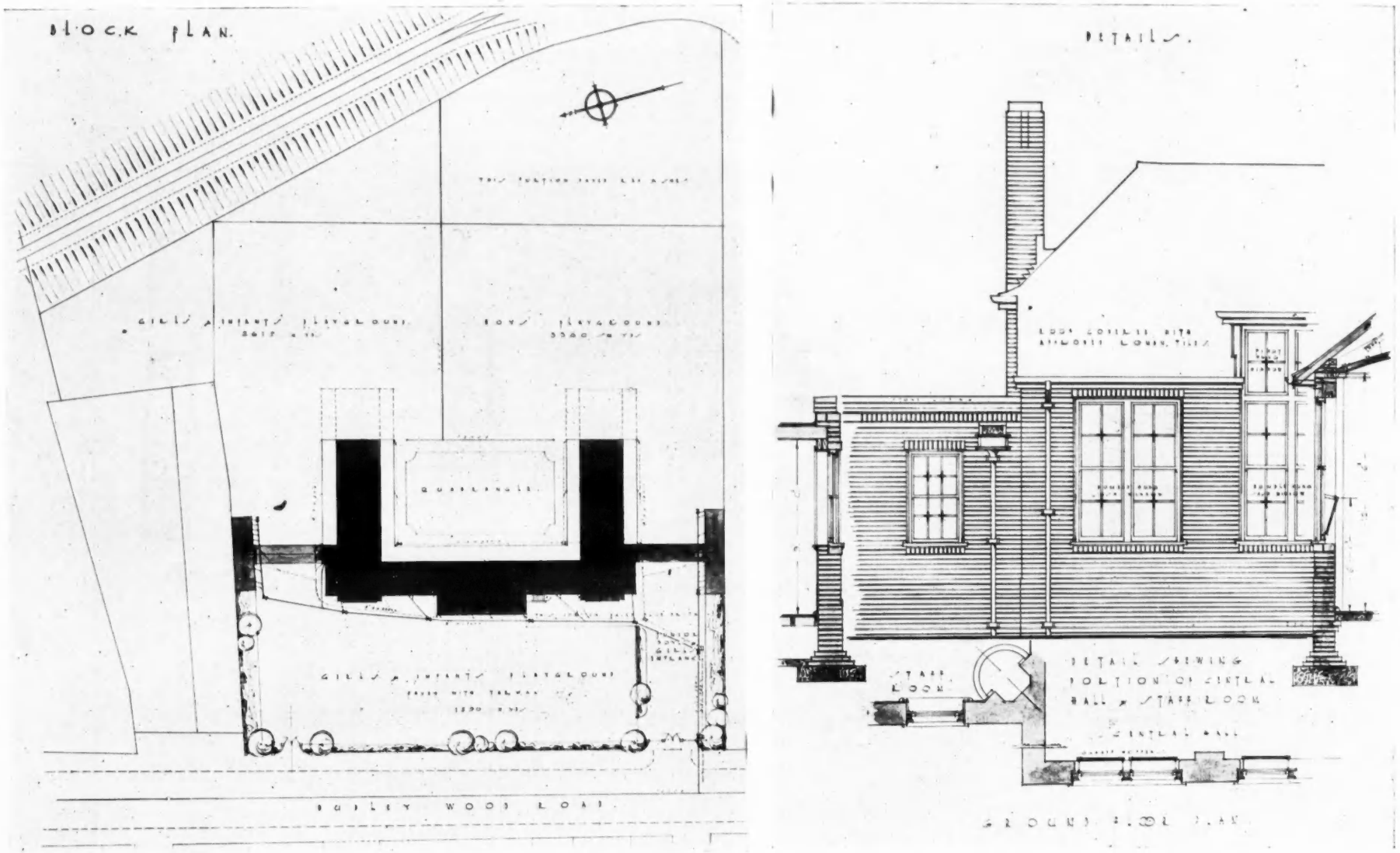


The winning design. By Scott and Clark. The architects' drawings, showing elevation to Dudley Wood Road and longitudinal and cross sections. The school is designed to hold 300 children. The assessor, Mr. H. T. Buckland, has made his award as follows: 1st—Scott and Clark, of Wednesbury; 2nd—A. T. Butler, of Dudley; 3rd—Webb and Gray, of Dudley.

The school is designed to hold 300 children. The assessor, Mr. H. T. Buckland, has made his award as follows: 1st—Scott and Clark, of Wednesbury; 2nd—A. T. Butler, of Dudley; 3rd—Webb and Gray, of Dudley.



Dudley Wood School Competition. The winning design. By Scott and Clark. The architects' plan of the ground floor. The premiums for this competition are £100, £50, and £25. The architects competing were required to have an office within fifteen miles' radius of Dudley. The plans are on exhibition in the Banqueting Hall of the Town Hall, Dudley, from 10 to 1 and 2 to 6 o'clock today.



Dudley Wood School Competition. The winning design. By Scott and Clark. The block plan and details showing portions of central hall and staff room. The elevations, ground plan, &c., are illustrated on the preceding two pages.



ENGLISH PRECEDENT No. 85

TERMINALS, PORTICO, ST. PAUL'S CATHEDRAL, LONDON

The terminals in Portland stone which flank the approaches to the south portico of St. Paul's Cathedral are the finest of their type. The introduction of a cylinder between the square pier and the vase is highly original. The selection of the ornament and the moulded details enhances the scale.

—[A. E. RICHARDSON]

THE HONEYWOOD FILE

BY KARSHISH

XXII: A Storm in a Paint Pot

The interior of the house is building. Sir Leslie Brash, the client, has gone away on a shooting holiday, and Lady Brash, by ill-considered interferences, is bringing the work to a standstill; has set the architect, Spinlove, and the builder, Grigblay, by the ears; and reduced herself to a condition of nervous prostration.

SPINLOVE TO BRASH (INVERNESS)

Dear Sir Leslie Brash, 8/9/25

I wired to you last night—"Work held up urgent writing"—as I am in a quandary, and Grigblay has been obliged to send away some of his men, and others will follow them unless I can at once give directions. As perhaps you know, Lady Brash wishes the partition between bedrooms 8 and 9 moved, so as to make the dressing-room bigger, and it was taken down without my knowledge, as was also, by an error, the partition between 5 and 6. There are numerous minor alterations and serious displacements involved in this change, and I feel sure that if these were understood you would wish the partition restored. There is also certain other work Lady Brash wants altered, but I have not been told what exactly is required. I have, however, stopped part of the work, including the drains, or this might have to be done all over again.

I feel it is difficult for you to come to any decision from such a distance, but think you would wish to know what is happening, as besides extra cost of the alterations there may be claims for interference with the work and, of course, time allowance will have to be given. The plastering and some other work is going on as well as circumstances will allow.

Yours sincerely,

What sort of answer Spinlove can expect to this letter it would be difficult to imagine. If he could not set out definite points for Brash to decide—and it is hard to see how he could do so—it would have been better for him to confine himself to saying that alterations have been ordered which make it important for Brash to be on the spot as soon as possible. However, this letter will give Brash some idea of what is happening.

LADY BRASH TO SPINLOVE

Dear Mr. Spinlove, 9/9/25

I really do not know why all this worry is with Mr. Blogs not doing what I said and so many questions going on and on and Phyllis away and Leslie and the man about the chimneys again because *now* is the time and not wait till the house is finished and perhaps have to be *pulled down* he says!! I want the wall moved but *not the wrong one* they have pulled down and the men all smoking and whistling instead of attending and the extra expense which I know Leslie will not pay when he always said the house was for me in case he died first and not for Mr. Grigby to stop the work and do what he likes and make the stairs not wide enough with all the trouble we had at Pilchins over again taking the window out to get it in [*? the wardrobe*] and such *small* ones [*? windows*] when I wanted them *big* and not with little squares all over but Mrs. Spooner says they *will* do it and you can get in quite easily by cutting the panes with a pocket-knife and perhaps be *murdered* so I shall never feel safe in the house when Leslie is away and you cannot have bars in case of *fire* she says. If I had known what it all meant I never never *never* would have agreed with the papers saying how ugly factory chimneys are and ought to be stopped and how am I to get others now the cook and second housemaid have given notice because a new house is *damp* though I told Leslie all along I could *not* live in a damp house and the trouble of moving in and the carpets not fitting and things getting broken! If Phyllis was here I could get a little sleep and not lie with it going round and round in my head and how it will all end I really do not know.

Yours v. sincerely,

MISS PHYLLIS BRASH (?) TO SPINLOVE

Dear Jazz, 10/9/25

I skipped home last night. What *have* you been doing to my poor little Mum? She has made herself ill over this wonderful house of yours. Why cannot the poor thing have clear glass and an aquarium—she has had one since she was an infant—and the wardrobe that belonged to her grandmother? I know the poor dear is apt to get into states, and we have to take care of her; but building without tears is surely poss.? Anyhow, come and be nice to her. It's no earthly writing letters, and it is very bad for her to be distressed—and what does the dam house matter anyway, you fussy old Architectooralooral Jazz?

Dad jumps in on Thursday—eight days! Great rejoicings—my sire has slaughtered a nine-pointer! *Not* nine pointers, thank goodness! Been staying with Snooty and her lot at St. Austell and doing *The Daily Mail* dry bathing-girl stunt all day. No great larks, but a lovely time. PUD.

PS.—Be sure you 'phone train. I will pick you up at station for yap before you see M.

"Pud" is clearly the daughter, Phyllis; not at all the sort of daughter one would expect the Brashes to produce. "Jazz" is perhaps derived from Jas. or the initials J. S.

TELEGRAM—BRASH TO SPINLOVE

10/9/25

Spinlove, Architect, Ranger House, Mayfair, London, W.1. Your telegraphic and written communications received stop desist from all alterations stop returning next Sunday prox ends Brash.

Brash seems to be a good customer of the Post Office.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 13/9/25

I arrived home today and am greatly gratified with the considerable advance in hastening progress during the interim of my absence. I shall be gratified if you will use your best endeavours to come down here as early as possible tomorrow, as the requisite haste brooks no delay. Kindly telephone approximate hour of your probable arrival.

I was so fortunate as to secure a fine trophy, though not a "Royal," to my rifle while in the Northern Highlands of Scotland. This I intend shall be affixed over the fireplace in the interior hall and will augment the embellishments of the apartment, which, unless my apprehensions mislead me, I anticipate may be a little plain in decorative accessories.

Yours sincerely,

Nothing much wrong here apparently—not even with the tautology! We do not know what happened at Spinlove's interview with Lady Brash, but we may guess that the buoyant vitality of "Pud" has made all sweet and secure.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 15/9/25

I write to confirm instructions you gave me yesterday in conversation, as follows:—

Breeze partition between bedrooms 8 and 9 to be restored, but to have door opening between the rooms. Partition to bedrooms 5 and 6 to be refixed so as to make dressing-room 1 ft. 9 in. wider and doorway to be closed up. Leaded glazing to be fixed as already supplied. Hot and cold service and waste connection for aquarium to be fixed in front hall window.

I yesterday gave directions to this effect and the work is going ahead.

I am grateful to you for giving way in the matter of the glazing, and I am sure that after the house is finished you will have no cause to regret your

decision. You would soon gather from the comments of your friends that sheet glass was a great shortcoming in such a house, and in time you would be likely to have it taken out and lead glazing fixed.

I enclose receipt for cheque which you handed me on Monday and for which many thanks. I note you are sending cheque to Grigblay.

With kind regards to Lady Brash and yourself,

Believe me,
Yours sincerely,

In these matters one can never tell how the cat will jump, but here is a happy ending indeed! When motives are ingenuous and methods frank, a tough dispute often clears away distrust and establishes a higher mutual respect and a deeper sympathy and liking.

As usual, Spinlove has said more than is necessary. By repeating the adroit argument that seems to have won the day for him he is rubbing in his victory, which is the last thing Brash wishes to be reminded of.

TINGE (QUANTITY SURVEYOR) TO SPINLOVE

Dear Sir, 15/9/25

Value of work done to 12/9/25	£11,250
Retention	1,844
	9,406
Already certified ..	7,000
Balance	£2,406

Yours faithfully,

As more than half the work is done, the maximum retention of 10 per cent. of contract has accumulated.

BRASH TO SPINLOVE

Dear Mr Spinlove, 18/9/25

An influential acquaintance is financially interested in a new super-paint which will shortly, he informs me, replace all other surface coverings now on the market. It is called Riddoppo, and is a *super*-paint giving a charmingly dainty and fascinating interior surface to the inside of houses, as it is free from any odiferous effects, cannot be scratched by the finger-nail, and is capable of receiving a high polish. It is elastic, so that cracks do not permeate through it, and it is also *non-inflammable* and thus *operates as a fire-proofing coat to both joinery and walls*. I should not be doing justice to the merits of Riddoppo if I did not add that it is *acid proof*, is compounded of entirely new secret elements, and that a *jet of boiling water or superheated steam* may be directed to impinge upon it for some minutes without deleterious effects occurring. The colours obtainable are very exquisite and varied, and we have provisionally selected tints which we desire embodied in the decorative embellishments of the various apartments of Honeywood Grange—as we anticipate naming the mansion. These will be known as the Pink Room, the Yellow Room, the Blue Room, and so forth, as the tints available will make it possible for each room to be identified by its own independent tint, and recognisable by the colour of its door.

My friend will allow me a special extra discount of ten per cent. and we shall have his advice in the choice of tints and decorative embellishments, as he promises that our house shall represent the best modern effects possible.

With kind regards,
Yours sincerely,

Silly old man!

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 19/9/25

I know nothing of Riddoppo, I am afraid, except that it is advertised in the Tube lift I daily use, as a "new novelty super-paint"; but this description, I assure you, is no recommendation, but rather the opposite. Grigblay is responsible for the painting; and the paint specified is well known and the best results are obtained with it. I can hardly think that Riddoppo is of any practical value as a fire-proofing, nor that it will hide cracks opening under it. Its ability to resist jets of "acid" and superheated steam will not count for much at Honeywood; you will not want the paint "highly polished," and as linseed oil and acetate of lead have been proved by long years of use to give perfect results, it is surely, on the face of it, no advantage but rather a *dis*advantage that Riddoppo is not compounded of them.

I trust that you will not allow your friend to settle the colours of the rooms and persuade you to variegated doors. This is a matter which Lady Brash and yourself should alone decide; it should depend entirely on your individual taste and upon the completion of the design of the house *as a whole*. I do not think your friend can have had any experience, or he would not make such proposals as you describe; nor would he make any proposals at all before he had seen the house in a state approaching completion.

With kind regards,
Yours sincerely,

PS.—I am sending Grigblay a further certificate for £2,400, and enclose note of my own fees in respect of that sum.

There is a touch of the east wind in this letter. Its logic is a shade too devastating, although we may admire the tact with which Spinlove urges that the Brashes alone should decide the decorative scheme when his intention must be to guide that decision.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 20/9/25

I have perused your communication with close attention, but you must permit me to indicate to you that the confidence with which you asseverate condemnation of Riddoppo super-paint, of which you admit you know nothing, seems to me—if you will permit me to say so—a little wanting in logical reasoning. You also ignore the fact that Riddoppo is free from odiferous emanations, a charm which makes it peculiarly attractive to Lady Brash, whose gastric equipment is sensitively susceptible to olfactory aggressions of every description [i.e. *Dislikes smells. Excellent!*].

My friend, a most eminent commercial gentleman, would be the last to be misled by deceptive assertions, and, as the various meritorious desirabilities of Riddoppo make it most amenable for our desires, I request you will direct Mr. Grigblay to apply it throughout.

Certainly, it is our intention to decide on the tints selected ourselves.

Yours sincerely,

Things are getting stuffy for Spinlove. The eminent commercial gentleman may be the last to be misled by deceptive assertions, and, at the same time, as Spinlove seems to suspect, the first to mislead with them.

SPINLOVE TO GRIGBLAY

Dear Sir, 21/9/25

Sir Leslie Brash wishes "Riddoppo super-paint" used throughout. Will you please get me full particulars of the paint, and also the manufacturers' instructions for using, and I will send you revised specification.

I enclose further certificate for £2,400.

Yours faithfully,

Apparently Spinlove is not fully aware of the danger of experimenting with new kinds of paints.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 21/9/25

I have directed Grigblay to use Riddoppo super-paint throughout, as you wish.

I hope you will reconsider painting the rooms, *with outsides of doors*, all in different colours. It is, I assure you, a thing which no one with knowledge of house decoration would propose. Your friend's idea seems to be to turn Honeywood into a paint-manufacturers' showroom. This, I am sure, will be intolerable to you.

With kind regards,
Yours sincerely,

More *kind regards! Spinlove has got well home; but he hits Brash nearly as hard as he hits Brash's friend, "the influential commercial gentleman."*

GRIGBLAY TO SPINLOVE

Dear Sir, 22/9/25

We know nothing of Riddoppo super-paint, and private inquiries we have made have had no satisfactory result; we therefore have respectfully to state that we cannot accept responsibility for same.

Yours faithfully,

Grigblay is wary. Spinlove should have made inquiries and satisfied himself before calling upon Grigblay to use the paint.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 23/9/25

I enclose copy of Grigblay's reply to my instructions to use Riddoppo.

Yours faithfully,

BRASH TO SPINLOVE

Dear Mr. Spinlove, 24/9/25

I have not been informed of the precise nature of your communication to Mr. Grigblay anent Riddoppo super-paint, but I must protest most vigorously against what I apprehend to have very much the appearance of a conspiracy to resist the performance of my wishes. This is intolerable and beyond bearing.

I perceive Mr. Grigblay anticipates that he will benefit financially by the handsome profit he has doubtless credited to himself on the painting, and is desirous to prevent my obtaining the 10 per cent. special discount; but Mr. Grigblay should be informed that it is his business to receive orders and not precisely to give them. It is for me, I apprehend, to decide what paint shall be used in my own residence; and for Mr. Grigblay to assume to dictate to me on this or any other matter is—if he will allow me to say so—perfectly monstrous and unendurable.

I do not know what the man means by "responsibility," and, if I may be allowed to be perfectly frank, I do not care. I give the order, and the responsibility for giving the order is mine. Mr. Grigblay's responsibility is to do what he is told *at once*.

The colours of the various rooms will be eventually decided later, but in that matter also I consider it is for the owner of the house to give orders and not receive them.

Yours faithfully [*sic*],

Liver!

SPINLOVE TO GRIGBLAY

Dear Sir, 25/9/25

I am instructed by Sir Leslie Brash to order you to paint with Riddoppo, as already directed. Sir Leslie Brash accepts all responsibility.

Yours faithfully,

Does Spinlove understand fully what that responsibility is? Grigblay understands perfectly well, but the indications are that Spinlove does not.

SPINLOVE TO BRASH

Dear Sir [*sic*], 25/9/25

I have instructed Mr. Grigblay to use Riddoppo, as you direct.

Mr. Grigblay knows nothing of the discount you speak of, and it would make no difference if he did, for he is not going to pay it. If profit was his chief concern he would not have troubled to tender for such a house as Honeywood.

I enclose copy of my letter to Mr. Grigblay of today, and also of my previous letter to him, so that all evidence of our conspiracy may be safely in your hands. These copies can be attested if you wish. My files are open to your inspection.

I think it very hard, Sir, that after my unsparing efforts to give you a house which will be entirely satisfactory to you, it should be handed over for a paint manufacturer to celebrate himself by turning it into a colour-cure asylum for lunatics—red for melancholia, blue for homicidal frenzy, yellow for religious mania, etc.; for this exactly describes—if you will permit me to be perfectly frank—the ignorant folly of your friend's fantastic proposal; and that, because I warned you of the risk of experimenting with an untried paint utterly discredited by the claims of its lying advertisements, I should be taken heavily to task; and, because the builder independently expresses the same distrust, I should be charged with conspiring with him to deceive you.

I am going abroad for a belated holiday on Friday, and expect to be back in three or four weeks. I am moving from place to place and shall be out of reach of letters, as I am told I need a rest.

Yours faithfully,

Nerves! Brash has broken the camel's back. Brash's letter which provokes this too passionate answer is an autograph. Had it been typed, the reference to conspiracy comes very near indeed to libel, and as it was sent to Spinlove's office, where the presumption is that all letters not marked "confidential" are opened by clerks, the question of libel still stands.

It is clear that Spinlove was bound to protest; and undignified and childish as his letter is, he has probably met the matter in the best kind of way. Since his letter is a spontaneous expression of natural feelings, it will be easy to excuse and to forget; whereas a stiff protest, and a demand for the withdrawal which cannot be refused, might not readily be either forgiven or forgotten. If Spinlove had written on the same impulse, but without losing self-control, he would be likely to have served his own and Brash's interests perfectly. In doing so, he might well have said, "I am sure, on reconsidering your letter, you will feel that it is not only unfair to me and to Mr. Grigblay, but that I am bound to ask for a withdrawal of the word 'conspiracy.'"

In point of fact, Spinlove is making far too big an outcry over the rainbowed bedroom idea. When the time comes he will, no doubt, be able to soften the horrors he dreads; but in any case the Brashes are entitled to have what decorations they wish for, and the enormity of the proposal depends rather upon application than upon principle. Spinlove's vanity probably is more deeply concerned than his æsthetic convictions.

BRASH TO SPINLOVE

Dear Spinlove [*sic!*], 26/9/25

I hasten to immediately respond to your communication. I apprehend that the epistolatory intimation to which you take exception was indited with unduly hurried precipitation, for which I desire to proffer profound regrets and tender sincere apologies. I employed the word "conspiracy," as I anticipate you will, on reflection, perceive, merely terminologically and figuratively, and solely in its loose phraseological and allegorical application, without ulterior signification.

[*Bravo! Bag of nuts to Sir Leslie Brash.*]

Lady Brash and myself design to enter into consultation with you on the subject of the decorative embellishments before arriving at definite decisions on variegation of tints, and, as you are aware, we greatly appreciate the attentiveness of the care you have expended on the operations, and the excellence of Mr. Grigblay's meritorious performance of the work.

With best wishes from us both for a successfully regenerative holiday.

Always your sincerely,

PS.—I shall be gratefully appreciative of occasional messages signifying your whereabouts for convenience of telegraphic communication, if necessary. In the interim of your absence I will keep a close inspection on the operations and communicate with your office.

As Spinlove's friend Dalbet said, "a real good sort". Ridiculous as the old boy is, this is not merely a generous but a sympathetic letter. It is, however, a little surprising; as was that to which it replies. There is somehow a lack of reserve—a background of intimacy—which the facts before us do not quite explain. Perhaps the compromise after Lady Brash took control is accountable. Anyhow, Spinlove can go away and enjoy his holiday. There is a note, "Answered 27/9/25," on the corner of the letter, so that Spinlove appears to have acknowledged it in his own hand.

(NEXT WEEK: XXIII—SIR LESLIE BRASH TAKES CHARGE)

AUSTRALIAN ARCHITECTS

An important step in the development of the art of architecture in Australia has been taken by the foundation of the "Australian Institute of Architects." The President of the new body is Professor Hook, of Sydney.

For a long time there was no connection of any sort between the architectural societies in the various States of the Commonwealth, and some of the States had no representative societies. The gaps were gradually filled and all these societies became allied to the R.I.B.A. Some years ago the separate societies established a "Federal Council of the Australian Institutes of Architects." This Council was admitted to alliance with the R.I.B.A. and given representation therewith. Now it has been transformed into the Australian Institute of Architects.

THE HOUSE OF WILLIAM BRUCE: V

An Architect's Home

And Its Influence on English Architecture

ONE of the chief expedients adopted by Sir William Bruce in the design of Kinross House is the small entrance porch, which is placed in the centre of the plan. Through the small porch, access is given to the large entrance hall.

This large hall is square in shape, and its dimensions are 28 ft. by 25 ft. Part of it has been divided into alcoves by the judicious use of columns of the Ionic order, surmounted by a cross beam enriched in plaster. All around the walls there is a large cove, covered with huge acanthus leaves. On the left of the hall is an archway leading to the main staircase. Beyond this is a doorway giving admittance to a corridor and the basement.

The main staircase—of which a photograph and measured drawing are reproduced below and on the facing page respectively—is 20 ft. square, and is similar to that at Holyrood Palace. It is an excellent example of scale staircases which appear in practically the whole of Bruce's houses. The balustrade is of oak, and is richly carved in panelled scrolls. Each flight is divided into two panels, carved and painted, as will be seen from studying the measured drawing. The whole of the newels, which are of simple design and contrast vividly with the panels, are square, worked in a dignified and simple manner. The newels are surmounted by decorative balls, each of which has leaf-carving, in the form of a cup, on the under half.

The effectiveness of the internal woodfinishing can be gauged by the treatment of the doors, one of which is shown below. They are treated with beautiful architraves of pleasing design.

The ceiling of the hall is also somewhat similar to that at Holyrood Palace. A portion of it is flat, and has a delicately marked panel, in which is a richly-carved modelled wreath around a flat dome.

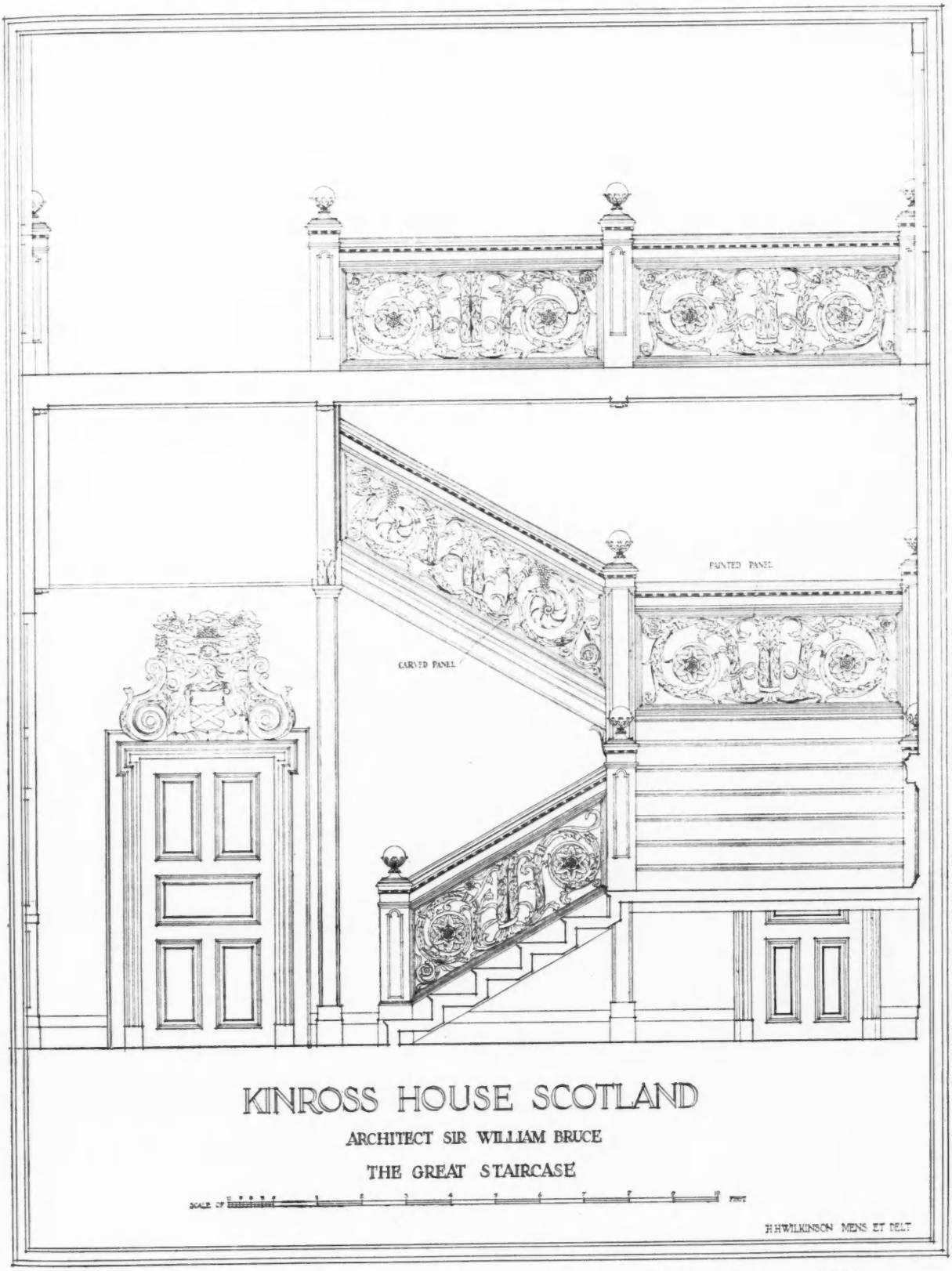
(To be continued)

UNIVERSITY OF LONDON LECTURES

The programme of extension lectures for the coming session has just been issued by the University of London, South Kensington. In addition to the courses which will be delivered in the City, lectures will be given at over fifty local centres in different parts of London and the suburbs. The subjects treated cover a wide range, and amongst the lecturers who will be delivering courses are the following: Dr. A. Compton-Rickett, Sir Banister Fletcher, P.R.I.B.A., Professor E. A. Gardner, Dr. Maxwell Garnett, Mr. C. E. M. Joad, Dr. Georges Lafourcade, and the Rev. Father McNabb.



The main staircase at Kinross House. The balustrade is of oak, with square newels surmounted by ball heads with leaf-carving on the under half. The soffit is of plain plaster and has an oak border.



A measured drawing of the main staircase at Kinross House. It has been specially prepared by H. H. Wilkinson to accompany the photograph on the preceding page.

E

THE POLYTECHNIC EXTENSION:
Its Novel Heating Plant

THE heating installation at the new Polytechnic building is the first of its kind to be operated in Great Britain, employing a high-tension electrode boiler with thermal storage system, the heat being distributed by means of a low-pressure hot-water system.

The supply available from the Marylebone Corporation mains is at 6,600 volts, 3-phase, 50 cycles, and is led directly into the boiler, which has a loading capacity up to 1,800 kilowatt-hours, without the intervention of any transformer.

The present building represents a portion only of the complete scheme: additions are to be made in 1937. The electrode boiler is of a capacity equal to both present and future demands, the present loading of the boiler being approximately 1,200 kilowatt-hours.

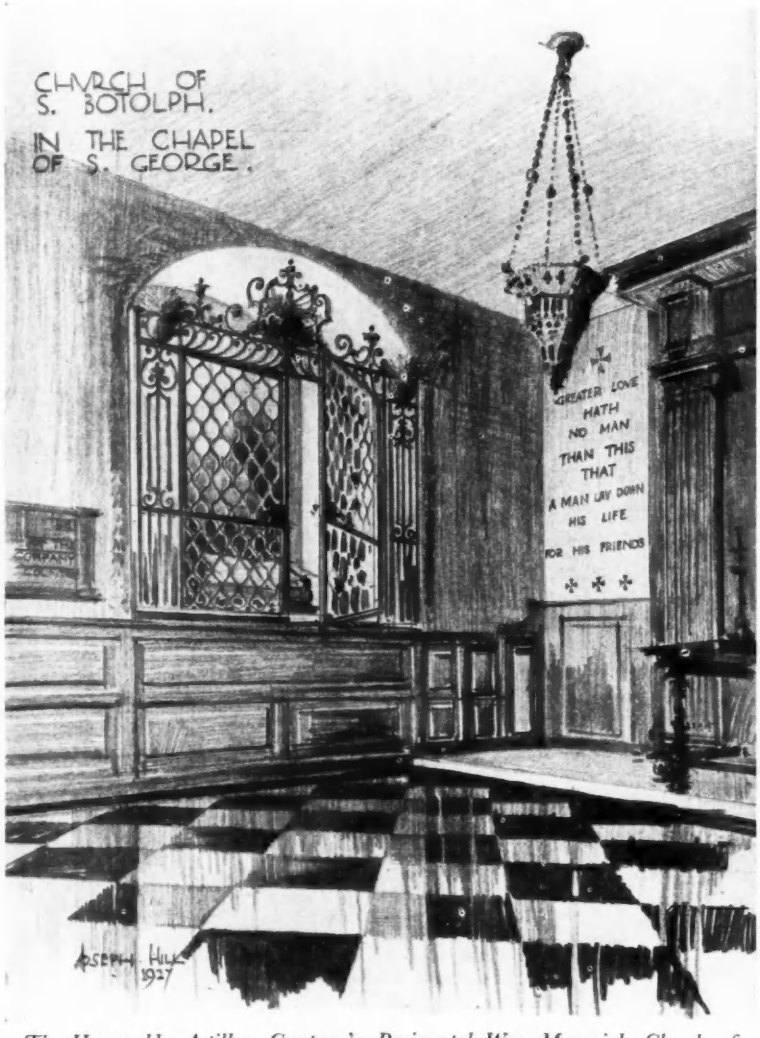
One of the great advantages of this particular kind of plant is that the boiler has an economical range between 20 per cent. of its normal load and 20 per cent. overload. It is thus possible to employ a large boiler for a relatively small duty without loss in efficiency. The electrode boiler takes advantage of the relatively low off-peak rates—i.e. the low price of current during night hours—and delivers the heat generated in the boiler to three thermal storage vessels having a water content of approximately 27,000 gallons. The water is pumped from the boiler into these vessels during the night, and the heat accumulated during that night loading is circulated by means of other pumps through the radiating system during periods when heat is required. The radiating surface in this instance is approximately 1,000 sq. ft.

In addition to direct heating by means of radiators, the plant deals with the heat requirements of the plenum batteries for the warming of the large and small halls and of the lower basement floors. In all, 1½ million cu. ft. of air per hour is delivered to these sections at a temperature necessary to maintain the required conditions. The air is washed before admission to the heater batteries, pre-heating being provided to prevent freezing of the washing water.

A special feature of the installation is the control room, in which are placed the pumps for circulating the water, and upon panels are provided means for regulating every detail of the heating and ventilating requirements of the building. Distant-reading thermometers, indicating the temperatures of all important sections, record in this room, so that the attendant can modify both the temperature and the volume of air to any section at will, without leaving the control room. Separate thermometers indicating the temperature of every individual flow section are provided, and the condition of the whole building can be visualized from the control boards at any moment.

The advantage of this apparatus is that local conditions can be met at any time, whether due to increase or decrease in external temperature or to a section of the building becoming temporarily or permanently dis-used. The boiler itself is about one-sixth the size of a boiler plant for the required duty, if coal- or oil-fired. The plant operates with complete cleanliness and absence of smell; no chimney is required; and a considerable amount of space is liberated for other uses.

The majority of present plants of this description are in operation upon the Continent, where development of the principle was evolved owing to the relatively low price of current obtained from hydro-electric stations. As the majority of British supply companies are now becoming alive to the economic advantage of utilizing off-peak load, for which no demand has previously existed, there is every reason to believe that apparatus such as this will become more generally used. The whole installation was designed, manufactured and installed by Messrs. Sulzer Brothers, of London.



The Honourable Artillery Company's Regimental War Memorial, Church of St. Botolph's, London. By Joseph Hill (Yates, Sturdy and Usher). The memorial takes the form of a vellum book, in which are inscribed the names of those who died in the war. This rests upon a ledge of oak, at the bottom of which is a scroll containing a concealed light. The whole is set within a deep window recess on the north side of the Regimental Chapel of St. George.

SOCIETIES AND INSTITUTIONS

ANCIENT ARCHITECTURE

Sir Banister Fletcher, P.R.I.B.A., gave the introductory lecture of a course of twenty-four weekly University extension lectures on "Ancient Architecture" at the Central School of Arts and Crafts, Southampton Row, last Wednesday.

Sir Banister pointed out that architecture was in all ages the visible exponent of civilization, and that the study of architecture is necessary not only for architects, craftsmen, and students, but also for authors, journalists, photographers, and antiquaries. The interest of history is increased by a knowledge of the dwellings and temples erected in ancient times to meet social, religious, and political requirements, while for the general public the ability to appreciate the monuments of the past adds to the enjoyment of travel and the understanding of our own surroundings.

He referred to the different influences —geographical, geological, climatic, religious, social, and historical—which aided in the evolution of ancient architecture. Starting from the world-famous Sphinx—sentinel of the mysterious past—he reviewed by word and picture the mysterious temples and massive pyramids and other tombs of the Egyptians, the palaces of the Assyrians and Persians, the temples and theatres of the Greeks, and the monumental buildings of the Romans, such as the Baths of Caracalla, the stupendous Colosseum, the Triumphal Arches, and the dwellings at Pompeii, as well as the churches of the Early Christians and the peculiar work of the Byzantines.

THE A.A. GERMAN TOUR

Mr. F. R. Yerbury, secretary of the Architectural Association, speaking of the tour to Germany, where the members of the Architectural Association visited Hamburg, Berlin, Frankfurt, Stuttgart, and Cologne, said that one of the things that impressed the party was that most of the building work being undertaken in the towns visited was of a municipal or State character. The building industry was mainly engaged on Government works, particularly housing. There was a good deal of rivalry between the cities in the provision of amenities for the people, and enormous activity was apparent in building for communal purposes. The provision of facilities for open-air life was a striking feature.

He said we had nothing to learn from Germany with regard to housing, but with regard to schools we had.

The planning and general atmosphere of many of the schools impressed the visitors. The buildings were very light and cheerful, and were what might be described as "human."

Baths, market halls, and other community buildings were very fine, and it was obvious that the Germans knew how to conserve the amenities of their cities. Even petrol stations were rendered attractive. In one instance he observed two handsome kiosks on the same premises. One was used for the sale of petrol and from the other milk was dispensed.

READER'S QUERY

SWEPT VALLEYS

H. H. C. writes : 1. *How is the head of a swept or laced valley in roof tiling finished and made watertight?* 2. *How is the foot finished?* 3. *What is the size of the curve of the firring up to be done in the valley so that the upper faces of the laths meet at right angles? Pitch of roof 45 degrees.*

1 : For a workmanlike finish it is essential that one ridge should definitely be "the main roof" and the intersecting one subsidiary. In these circumstances the subsidiary ridge curves upwards towards the higher slope of the main roof sufficiently far for the sweep (the actual valley having been passed) to die out by gradually diminishing the tilt of the courses on the main roof. Old practice usually bedded a reversed ridge-tile as a cross-gutter between the last ridge-tile of the intersecting roof and the first uninterrupted course of the main roof; modern practice, even when repeating this expedient, makes things safe by a lead saddle, covering the intersection and hidden by the ridge and adjacent tiles. Photographs in Mr. Nathaniel Lloyd's recent book on *Building Craftsmanship* will make this clear.

2 : The foot of the valley below the first set of fully-swept courses is packed up with tiles cut to shape and bedded.

3 : The curve will vary with every change of pitch, or gauge of tiling. In old work using rent oak laths it was possible to "spring" these somewhat to the intersection to accommodate the sweep of the courses. It is practically impossible to state the curve in terms of geometry, but fortunately most good tiling firms now fully understand the swept valley and have men who carry it out—which was distinctly otherwise twenty years back. The modern swept valley is a safer thing than the old one, thanks to the existence of tile-and-half tiles, and the usual practice now is to fix an 11-in. sole board up the valley and lay thereon a line of tile-and-half tiles (lapped) anglewise, up to which the courses are swept. The "easing" of the tile courses being three-dimensional—a combination of lift, turn, and tilt—cannot be explicably rendered by a drawing; again, the photographs in Mr. Lloyd's book help.

E. G.

COMPETITION CALENDAR

No date. The General Electric Company, Ltd., is to erect a "Pavilion of Light," including a suite of six rooms, at the 1930 *Daily Mail* Ideal Home Exhibition at Olympia, Kensington, S.W. The lounge, dining-room, bedroom, and nursery will be the subjects of one section of the competition for architects and decorative artists, while the kitchen and bathroom will be the basis of another for electrical contractors, with the object of demonstrating the ideal use and security of electrical equipment in these rooms. When the results of the competition have been decided by a committee of assessors, whose names will be announced later, the winning designs will be incorporated in the "Pavilion of Light." Full particulars and rules of the competition will be announced later.

No date. Competition for the best-designed labour-saving houses in three types, priced at £750, £850, and £1,000 respectively. Premium : 100 guineas. Application for conditions of the competition, etc., should be made to C. E. Oxley, Secretary, B.C.S. Housing Scheme, Chaddeston, Park Road, Derby.

November 2. The City of Birmingham Museum and Art Gallery Committee proposes to erect a Branch Art Gallery at the Pebble Mill Road entrance to Cannon Hill Park, and invites architects practising within the City boundaries to submit competitive designs. Total cost, £6,000. Assessor : Ernest C. Bewlay, F.R.I.B.A. Premium : £100. Application for conditions of the competition, etc., should be made to S. C. Kaines Smith, Keeper, Museum and Art Gallery, Birmingham. Deposit 10s. 6d. Latest date for submitting designs : November 2.

November 8. The Somerset Rural Community Council, in conjunction with the R.I.B.A., invite architects and architectural assistants resident in Somerset to submit designs for Country Garages and Petrol Filling Stations. Assessor: Harold E. Todd, A.R.I.B.A. Prizes: The "Sir Charles Wakefield" prize, £10 10s. and silver cup presented by the Somerset Automobile Association. Further prizes of £7 7s., £5 5s. and £3 3s. and two cups presented by the S.A.A. Particulars from the Secretary, Somerset Rural Community Council, 42 Bridge Street, Taunton. Deposit 10s. 6d.

December 7. The Provost, Magistrates, and Councillors of Dumfries invite architects practising in Great Britain to submit competitive designs for the Town Hall and Municipal Offices, which it is proposed to erect on the site of the old Town Hall and of the Municipal Offices, Dumfries. Assessor : Sir George Washington Browne, P.R.S.A. Premiums: £300, £200, and £100. Application for conditions of competition, etc., should be made to R. A. Grierson, Town Clerk, Town Hall, Dumfries. Deposit £2 2s. Latest date for sending in designs: December 7.

January 1. The Aberystwyth Town Council invite architects to submit competitive designs for the erection of a Municipal Pavilion with Refreshment Rooms and other conveniences on the site of the old Waterloo Hotel, at the corner of the Marine Parade and Terrace Road, extending to Bath Street. Assessor : Arnold Thornely, F.R.I.B.A. Premiums : £100, £70, and £30. Application for conditions of competition, etc., should be made to T. J. Samuel, Town Clerk, Town Hall, Aberystwyth. Deposit, £2 2s. All designs must be sent to the Borough Surveyor, Corporation Offices, Smithfield Road, Aberystwyth, not later than January 1, 1930.

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

A NEW PRESIDENTIAL BADGE

Illustrated below is the new presidential badge of the Sheffield, South Yorkshire and District Society of Architects and Surveyors. A competition was held for the design and was won by Mr. J. E. Farnsworth, a student of the Department of Architecture at the Sheffield University, at the head of which is Mr. Stephen Welsh, M.A., B.ARCH., A.R.I.B.A. The work was executed by Mr. T. H. Popple, Secretary and Fellow of the Sheffield Art Crafts Guild. The design embodies a central Doric column with Ionic and Corinthian columns in the background, supporting a beam. The centre column rests on a pedestal on which are shown the arms of the city of Sheffield, while engraved on the surrounding circle, enclosing the design, is the title of the society—the Sheffield, South Yorkshire and District Society of Architects and Surveyors. The whole is surmounted by a Greek antifixa, on either side of which is the rose of York. The metal is silver-gilt.

It is stated in the last annual report of the society, from which the illustration is reproduced, that the total membership now stands as follows: 8 honorary members, 69 fellows, 51 associates, 3 students, 4 lay members, amounting in all to 135, as against 125 of last year. The canvassing of outlying districts in the society's area may now be considered to be almost complete, and the total accession of new members secured by this means, numbering about forty, shows that the result has been well worth the time and trouble expended. In this connection the council has given careful consideration to the proposed formation of a new organization having Lincoln as its centre. A meeting of the architects of the county was held at Lincoln, under the auspices of the R.I.B.A., at which representatives of the "Notts and Derby" and of the society were present, when an organizing committee was formed and charged with the duty of considering the details of such a scheme. It is felt that this new organization will increase the influence and the usefulness of the R.I.B.A. in the county to an extent not possible under existing conditions, and that it will at the same time secure many advantages for the Lincolnshire architects, of which, owing to geographical conditions, they are at present deprived.



The new presidential badge of the Sheffield, South Yorkshire and District Society of Architects and Surveyors.

LAW REPORT

MEANING OF "SUBJECT TO CONTRACT"

Wilson v. *Balfour.* *Chancery Division. Before Mr. Justice Eve*

This case gave rise to a legal point of interest in the acceptance of an offer by a purchaser "subject to contract."

The action was by Mr. Ernest E. Wilson, of Oaklands, West Heath Road, Hampstead, against Miss Betty Balfour, of Alexandra Court, Queen's Gate, Westminster, for specific performance of an agreement contained in a document of July 1929, signed by the plaintiff and the defendant, and in a draft contract agreed between the solicitors, for the sale by the plaintiff of Oaklands for £8,750.

Mr. Beaumont, for the plaintiff, stated that his client made a written offer to sell the house to defendant, the purchase to be completed on a date to be mutually agreed. The defendant accepted the offer "subject to contract." Plaintiff executed a draft contract and sent it to Miss Balfour's solicitors for execution by her. She refused, however, to complete the purchase and said there was no binding contract.

Counsel submitted that the only condition precedent was that the solicitors were to agree the terms of a formal contract, and that there was a binding contract in the acceptance of the offer.

Mr. Vaisey, K.C., for the defence, contended that there was no binding contract.

His lordship held that the action failed and dismissed it with costs. Reviewing the facts of the case his lordship said it appeared that the defendant wrote "I accept the above offer," and her solicitors added the words "subject to contract."

Prima facie, "subject to contract" meant execution by both parties of a formal contract until the execution of which there was no binding agreement. Mr. Beaumont had suggested that the words did not import the necessity of a formal contract by both parties but merely that they imported the execution of such a contract as was contained in the vendor's offer. That was that a formal contract was to be agreed between the respective solicitors, and that when the condition was complied with the contract became binding. His lordship said he could not take that view. The words "subject to contract" had a definite ascertained legal meaning. The offer contained a statement which would have rendered it very unwise on the part of the purchaser's solicitors to have allowed her to make an unconditional acceptance or any acceptance conditional on an agreement as was suggested between the respective solicitors.

CORRESPONDENCE

AN UNDERGROUND ANOMALY

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I have read "Astragal's" paragraph entitled "An Underground Anomaly," in your issue for October 2. We have always recognized that the facilities for exchange between the Central London and London Electric Railways at the British Museum and Holborn stations were entirely unsatisfactory, and we have over and over again explored the possibility of connecting the stations either at the low level or by subways under the street, but we have not so far been able to devise a satisfactory scheme.

The only way in which the two stations can be brought together is to build new station tunnels on the Central London Railway for the British Museum station nearer to the station tunnels for the Holborn station, and it would be necessary that this work should be carried out while the Central London Railway is maintained in service.

You will therefore see that a quite serious engineering problem is before us. We do not despair sometime of producing a satisfactory scheme for remedying this defect in our railway connections.

FRANK PICK,
Managing Director,
London Underground Railways.

TRADE NOTES

On October 1 Messrs. Gordon Russell, Ltd., of Broadway, Worcestershire, held a luncheon at the Welbeck Palace Hotel, London, after which Viscountess Rhondda opened the new shop of the company at 28 Wigmore Street, W.1.

The firm was founded twenty-five years ago as antique dealers. In 1920 they started making furniture to the modern designs of Gordon Russell, using unusual English woods — laburnum, yewtree, mulberry, cherry, walnut, and oak, and were awarded gold and two silver medals at the Paris International Exhibition of Decorative Art, 1925. No reproductions of old pieces are made in the workshops. Over one hundred persons are now employed in the beautiful village of Broadway. The opening of London showrooms has been rendered necessary owing to the great expansion in the demand for beautiful things of original design, extremely well made and suitable for use today. The metal fittings are also made at their own smiths' shop in Broadway. One or two of the first pieces of a new kind of furniture, which will be made in quantities, are being shown at the shop. Messrs. Gordon Russell have already held three exhibitions of furniture in London, one of which was visited by H.R.H. the Duchess of York, who purchased several pieces for the Princess Elizabeth. Every endeavour will be made to make the shop a London centre where modern things of all kinds can be seen.

Water Control by Pumping, just issued by Messrs. Ruston and Hornsby, Ltd., of Lincoln, gives sound information which should be of much use to all interested in pumping operations. The booklet covers a wide field and deals with, among other matters, general pumping, drinking-water supplies, land drainage and irrigation, and protection against floods and fire. With regard to protection against fire, it is stated that frequently the fire installation can be combined with the general water supply for the whole plant if a reserve supply of water, isolated from the general supply in a manner approved by the underwriters, is held in constant readiness for instant demand. A common and very convenient arrangement is to provide a tank of approved capacity elevated to a height suitable for commanding the danger zone and to keep this replenished regularly by a pump. A sufficient volume of water at a suitable head is then always available, and at any moment the pump may be put into motion to keep up the supply, or the pump may deliver direct to the hydrants when called upon. If desired, this arrangement may be supplemented by an automatic sprinkler system and, in addition, the pump may be arranged to stop and start automatically according to the level of water in the tank. A great height of tank is not necessary in cases where fire protection is limited to a specific area, such, for example, as a woodworking shop.

As guests of Sir Herbert Hambling, Bart., the banker, a company of 100 architects and ladies dined at the Savoy, London, and went on to the first night of "Follow Through" at the new Dominion Theatre. The function signalized the exclusive use in the decorations of the theatre of Surfex plastic paint and other paints of Lewis Berger & Sons, Ltd., of which company Sir Herbert is vice-chairman.

THE LATE MR. J. F. BURN

We regret to record the sudden death of Mr. J. Faulder Burn, head and founder of Messrs. Winget, Limited, the well-known firm of concrete machinery manufacturers, of London and Warwick. He was forty-seven years of age. As one of the pioneers of concrete constructional work in this country, he founded Messrs. Winget, Ltd., in 1906. Later, it is stated, Mr. Faulder Burn built and developed at Warwick the only foundry and engineering works in this country specially devoted to the manufacture of concrete machinery of every description. During the war the firm were able to help the British, Belgian, French, and American Governments to solve the vast problem raised by the grave shortage of bricks, timber, and other materials, all the standing camps and War Office housing schemes, it is claimed, being built largely with the aid of "Winget" block-making machines and concrete mixers. Many other public and private buildings have been erected by these means in all parts of the world.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :—

Milner Court (pages 521-527). General contractors, Trollope and Colls, Ltd. Sub-contractors : Thomas Pascall and Sons, facing bricks and tiles; Hollis Bros. & Co., Ltd., wood-block floors; Benham and Sons, Ltd., cooking apparatus and fitments; John Bolding and Sons, Ltd., sanitary equipment; G. N. Haden and Sons, Ltd., central heating, domestic hot water and electrical engineering; Considere Construction, Ltd., cellular raft and reinforced construction; Henry Hope and Sons, Ltd., leaded-light windows; Mather and Platt, Ltd., hand fire appliances.

The Polytechnic Extension, Gt. Portland St., W.1 (pages 528-533). General contractors, Bovis, Ltd. Sub-contractors : Diespeker & Co., Ltd., big-span floors and terrazzo; Automatic Sprinkler Co., Ltd., sprinklers; Art Pavements and Decorations, Ltd., marble and tiling, decorative plaster; Brookes & Co., granite; Crittall Manufacturing Co., Ltd., windows and iron screens; Carter and Aynsley, Ltd., door furniture; Comyn Ching & Co., Ltd., ventilating gratings; Coleman & Co., revolving doors; Dent and Hellyer, Ltd., plumbing; Dorman Long & Co., Ltd., steelwork; Granwood Flooring Co., Ltd., classroom floors; Heywoods, wood sliding screens in classrooms; Haywoods, Ltd., iron escape stairs and pavement lights; Hobbs, Hart & Co., Ltd., locks; Hopton Wood Stone Firms, stone; Mather and Platt, Ltd., hydrants; North British Rubber Co., Ltd., rubber flooring in entrance hall and balconies; Nettlefold, Ltd., door furniture; F. Polden & Co., Ltd., electrical work; G. Parnall & Co., panelling in dressmakers' room; Shaw's Glazed Brick Co., Ltd., tiling in restaurant and lavatories; Stewarts and Lloyd, Ltd., flagpoles; Starkie Gardner & Co., ironwork and enamel panels; Sulzer Bros., electrical heating; York Shipley Ltd., refrigerating; Waygood-Otis, Ltd., lifts; Leeds Fireclay Co., Ltd., tiling on staircases; Harrison, bronzing; J. P. White and Sons, Ltd., oak panelling in halls and social rooms; Incinerator Co., incinerator; Allom Bros., electric light fittings in social rooms; Holophane, Ltd., lighting for stage and classrooms; London Sandblast Co., decorative glass; Faldo & Co., asphalt.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office, by our own patent expert. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

28194. Bratt, L. A. Fireplaces. September 17.

28231. Heck, H. W. J., and Minter, C. J. Plan-holder. September 18.

28492. Hewitt, P. M., and Lewenstein, A. S. Veneered blocks for floors, etc. September 19.

28356. Jigs (1926), Ltd., and Struben, A. M. A. Domestic stoves and fireplaces. September 18.

28627. Lancashire, A. E. Centering for concrete floors. September 21.

SPECIFICATIONS PUBLISHED

318951. Robson, W. H., and Scott, R. W. Roof structures or the like.

319125. Miller, C. H., and Dann, S. W. Scaffold-pole grip or tie.

296995. Hayden, D. H. Ties for concrete forms.

319145. Neilson, A. Weather-bars for doors.

319148. Kenrick and Sons, A., Ltd., and Hough, J. T. Firegrates.

ABSTRACT PUBLISHED

316564. Marks, E. C. R. Building sheets and slabs.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BERMONDSEY B.C. is to purchase property in Grange Road for a re-housing scheme.

The BARKING U.D.C. is to borrow £7,300 for the erection of a temporary school on the Barking section of the Becontree estate.

The CROYDON Education Committee is to provide elementary school accommodation for 1,600 children in the Mitcham Road district.

The Central Estates Co., Ltd., of Kenton, Harrow, are to develop the Woodvale Estate, CROYDON. Plans have been passed for the erection of 318 houses.

The BARKING TOWN U.D.C. has agreed upon a scheme for the erection of 237 houses and twenty-four flats on the second section of the Upney estate, at an estimated cost of £124,500.

Plans passed by the MARYLEBONE B.C.: Premises for British Broadcasting Corporation, Portland Place, for Messrs. Val Myer and Watson-Hart; buildings, 19–23 Wells Street, for Messrs. Richardson and Gill; buildings, 456–468 Oxford Street and Orchard Street, for Messrs. Trehearne and Norman.

The ILFORD Corporation has passed plans for the erection of a medical officer's residence at the isolation hospital, at an estimated cost of £1,869, and also the enlargement of the nurses' home, to provide twenty-nine additional bedrooms, at an estimated cost of £9,300.

Plans passed by the BARKING U.D.C.: House, Movers Lane, for Mr. E. E. Steele; six houses, Alfred's Way, for the County of London Electric Supply Co., Ltd.; extensions to dust-extracting plant, Harts Lane, for the Cape Asbestos Co., Ltd.; drum store, Harts Lane, for Messrs. Bimoid, Ltd.; school, Becontree Estate, for the London County Council; 165 houses, section of Becontree Estate, for the London County Council; alterations, "Duke of York" public-house, for Messrs. Mann, Crossman and Paulin; new street, adjoining River Road, for Developments (London), Ltd.; fourteen houses, Upney Lane, for Mr. J. Ranson; laboratory, River Road, for British Anti-Fouling Composition and Paint Co., Ltd.; house, Ripple Road, for Messrs. W. Thomas and Sons; three buildings, Jenkins Lane, for Messrs. Gross, Sherwood and Heald, Ltd.; store, River Road, for the British Anti-Fouling Composition and Paint Co., Ltd.

Plans passed by the CROYDON Corporation: Alterations and additions, "Rising Sun," North End, for Mr. C. H. Ridge; mission hall, Bensham Lane, for Mr. J. R. Webster; alterations and additions, 68 London Road, for Mr. F. Sage; extension of premises, Surrey and Middle Streets, for Messrs. Grant Bros.; mission room, Silverleigh Road, for Mr. C. H. Ridge; factory additions, Gloucester Road, for the British Oliver Typewriter Co.; additions to factory, Spring Lane, for Messrs. H. & W. Bourne, Ltd.; dairy, Acacia Road, for Mr. C. H. Ridge; forty-six houses, Selsdon Park Road, for Mr. T. H. Jones; eleven houses and shop, Zermatt Road, for Mr. A. Andrews; ten houses, Turle Road, for Mr. J. H. Pearson; four houses, Coombe Lane, for Messrs. Smith & Co.; three workshops, Canterbury Road, for Mr. B. Selier; thirteen houses, Ashley Road, for Mr. A. Duckit; four shops, Wickham Road, for Messrs. Burcote, Ltd.; fifty houses, Hillcote Avenue, Covington and Crescent Ways and Gibsons Hill, for Mr. H. Macintosh; three houses, Wharncliffe Gardens, for Mr. R. Tomei; six houses, Grange Avenue, for Mr. W. H. Becket; house, garages and workshop, Fairview Road, for Mr. S. Boothman; factory addition, Aurelia Road, for Messrs. Grace and Marsh; twenty-one houses, Turle Road and Benet Gardens, for Mr. J. H. Pearson; three shops, Denning Avenue, for Bovis, Ltd.; addition to dance hall, Elmwood Road, for Mr. W. Lugg; alterations and additions, 96 and 98 High Street, for Mr. H. Macintosh; two houses, Bensham Grove, for Mr. F. Snelgrove; seven houses, Grange Gardens, for Messrs. H. and D. Winn; two houses, Croham Manor Road, for Mr. T. A. Lewis; studio, workshop and darkroom, 144-47 London Road, for Messrs. Chart, Son and Reading; two houses, Woodmansterne Road, for Messrs. C. Midmer and Sons; film factory, Waddon Mills, for Mr. J. T. R. Wildman; shop and showrooms, 14 Crown Hill, for the Times Furnishing Co., Ltd.; substation, Colson Road, for Messrs. Creed & Co., Ltd.; eight houses, Beauchamp Road, for Messrs. G. Poulton and Son; shops and showrooms, London and Brigstock Roads, for Mr. L. Poole; five shops, Mitcham Road, for the Croydon Town Hall Corporation; slipper baths, washhouses and conveniences, Mitcham Road, for Corporation of Croydon; shop and offices, 72 North End, for Mr. E. Bates; battery station, Teevan Road, for Mr. A. C. Manton; addition to school, Shirley Road, for Messrs. Paish, Tyler and Crump; shops, 69–71 South End, for the International Tea Stores, Ltd.; two shops and flats, London Road, for Mr. R. Cohen; gymnasium, Russel School, Coombe Lane, for Mr. E. H. Smith.

EASTERN COUNTIES

The CHELMSFORD Corporation is considering the acquisition of 100 acres of land at Patching Hall Lane for another housing scheme.

The LOWESTOFT Corporation has obtained sanction to borrow £5,056 for the erection of twelve houses at Kirkley Gardens.

The governors of the Chigwell School, ESSEX, are to borrow £7,000 for the erection of an assembly hall and four classrooms.

The Essex Education Committee is seeking sanction for a loan of £19,000 for the erection of a senior school for 400 pupils at Malvern Road, HORNCHURCH.

The CHELMSFORD Corporation has asked the borough engineer to prepare plans and specification for the erection of two- and three-bedroom non-parlour-type houses.

The ESSEX and COLCHESTER Mental Hospitals Joint Committee is to prepare a scheme for building a new mental hospital for the accommodation of 1,500 patients.

The Essex Education Committee is to prepare sketch plans for the erection of a senior school at CHINGFORD, to provide accommodation for 300 pupils, at an estimated cost of £18,044.

The Essex Education Committee is to prepare sketch plans for the erection of a senior school at CLACTON-ON-SEA, to provide accommodation for 480 pupils, at an estimated cost of £20,313.

The Board of Education has asked the CHELMSFORD Education Committee to formulate plans for the erection of a council school for the St. John's district.

Plans passed by the CHELMSFORD Corporation: Garage and stores, Wood Street, for Mr. H. C. Hasler; extension of offices, London Road, for the Automobile Association; extension to fire station, Market Road, and office, workshop and stores, Corporation Road, for the Corporation; two houses, Lynmouth Avenue, for Mr. W. J. Wade; extension of offices, for the Essex County Council.

Plans passed by the LOWESTOFT Corporation: Factory, Waveney Drive, for Lowestoft Co-operative Society, Ltd.; house, Park Estate, for Com. McNeile Dibb; bungalow, Normanston Drive, for Mr. F. C. Clarke; house, Normanston Drive, for Mr. J. A. Gaze; bungalow, Blackheath Road, for Mr. S. Westgate; four bungalows, Kirkley Run West, for Mr. J. A. Gaze; bungalow, Yarmouth Road, for Mr. J. Bloomfield; electric switchboard house, South Wharf, for Messrs. C. and E. Morton, Ltd.; two bungalows, Sandy Lane, for Mr. E. F. Youngman; offices, The Marina, for Messrs. Johnson and Nicholson; two houses, Kirkley Run West, for Mr. C. T. Chaplin.

Plans passed by the BEDFORD Corporation: Four houses, Goldington Road, for Mr. E. H. C. Inskip; conversion of gymnasium into assembly hall, Hays' Modern School, for Mr. H. W. Liddle; house and shop, Goldington Road, for Mr. B. Brandon; offices and garage, Lurke Street, for Mr. E. H. C. Inskip; new premises, 6 Cauldwell Street, for Messrs. Searle and Searle, on behalf of Westminster Bank, Ltd.; alterations, 75 High Street, for Dust (Bedford), Ltd.; alterations, 3 Midland Road, for Messrs. Murdoch, Murdoch and Co.; house, Goldington Road, for Mr. F. Corby; two houses, The Embankment, for Mr. A. L. Nicholls; alterations, 35 and 37 Midland Road, for Messrs. Webb Bros.; two houses, London Road, for Mr. E. H. C. Inskip; four houses, Goldington Road, for Messrs. H. Young and Son.

SOUTHERN COUNTIES

Plans passed by the OXFORD Corporation: Furniture store, rear of 18 York Avenue, Headington, for Mr. A. Goodban; house, Church Lane, Headington, for Mr. Wheeler; eight houses, Binswood Avenue, Headington, for Manor Estate Co.; house, Old Road, Headington, for Mr. A. Hinton; alterations, "Carpenters' Arms" public-house, Hockmore Street, Cowley, for Hall's Oxford Brewery, Ltd.; house, Sandfield Road, Headington, for Mr. A. A. Tyler; two houses, Glanville Road, for Mr. F. Organ; house, Old Road, Headington, for Mr. A. Miller; hay-barn and additions to farm buildings, for the University of Oxford; house and shop, Beaumont Road, Headington Quarry, for Mr. E. Kislingbury; workshop and store, Western Road, for Mr. A. W. Smith; grandstand, University Running Ground, Iffley Road, for the Oxford University Athletic Club Committee; house, Sandfield Road, for the Manor Estate Co.; repair shop, destructor plant and open shed, Garsington Road, Cowley, for Morris Motors, Ltd.; bakery, Oswestry Road, for Mr. T. V. Brooks; forty-two houses, Green Road, for Messrs. Ives and Rushby; alterations, 25 Park End Street, for St. George Café Co., Ltd.; rebuilding of bookshop, 50–51 Broad Street, for Messrs. B. H. Blackwell, Ltd.



House at Jordans, near Beaconsfield. Designed by Douglas Rowntree. The walls are of brick and roughcast. Metal casement windows have been provided. The roof is of heather thatch on straw. Ground- and first-floor plans are reproduced on page 547.

SOUTH-WESTERN COUNTIES

The TORQUAY Corporation has approved a scheme prepared by the borough engineer for the construction of a new swimming bath at Upton at an estimated cost of £13,600.

Plans passed at POOLE: Addition to dwelling-house, Banks Road, for Hawker, Mountain and Bailey; dwelling-house, Cornwell Road, for S. Whitelock & Co.; five dwelling-houses, Gloucester Road, for Philpotts and Manners; garage, Lindsay Court, Lindsay Road, for O. R. Mulley; dwelling-house, Pearce Avenue, for Brailsford and Wood, Ltd.; amended plan of lock-up shop, Poole Road, for H. J. Cundy; two pairs semi-detached shops and dwelling-houses, Blandford Road, for H. F. Payne; amended plan of alterations and additions, Baptist Church, Buckland Road, for E. W. Kingsbury and Sons; addition to dwelling-house, Elms Avenue, for R. J. Bishop; dwelling-house, Langley Road, for A. E. Macklin; dwelling-house, Caledon Road, for C. R. Symonds; dwelling-house, Glenair Road, for H. J. Wilson and Sons; lavatory and w.c., Elm Cottage, Panorama Road, for Alan Stewart; alterations and additions, Sandecotes School, Sandecotes Road, for Walter Hoare and Sons; addition to dwelling-house, Shaston, Frankland Crescent, for E. F. Knight; dwelling-house and garage, Pinewood Road, for T. E. Grimes; dwelling-house, Harbour Hill Road, and addition to dwelling-house, Harbour Hill Road, for J. Francis; dwelling-house, Alder Road, for H. J. Allen; dairy, rear 37 Langley Road, for S. E. Bracher; two dwelling-houses, Pine Avenue, for S. G. Ward; amended drainage plan of twelve dwelling-houses, Sherringham Road, for S. Lawrence; addition to dwelling-house, Beresford Road, for A. G. Gray; dwelling-house, Enfield Road, for L. J. Newell and Sons; three dwelling-houses, Gloucester Road, for Philpotts and Manners; dwelling-house and garage, Brownsea Road, for G. T. Glover; dwelling-house, Alverton Avenue, for F. Hole; dwelling-house, Frankland Crescent, for E. F. Knight; dwelling-house, Hennings Park Road, for O. R. Malley; garage, Charnwood, Tower Road, for W. E. Jones and Son; dwelling-house, Victoria Road, for M. J. Lawford; dwelling-house and garage, Pearce Avenue, for Maggs and Maggs; dwelling-house, Winston Avenue, for S. C. Rowden; dwelling-house, Harbour Hill Road, for J. Jagger; pair of semi-detached dwelling-houses (four flats), Palmers Road, for H. G. Palmer; alterations and additions, Pinewoodedge, Ettrick Road, for J. H. Butler; dwelling-house, Good Road, for H. J. Allen; dwelling-house, Cliff Drive, for F. Ling; dwelling-house, Parkstone Avenue, for N. Neale; garage, Lawrence Drive, for Mackenzie and Phillips; extension (store) to garage and dwelling-house, Fernside Road, for R. Thorne; workshop extension to garage, rear of shops, Haven Road, for H. J. Hillman; lavatory and w.c., rear 102 High Street, for Burt and Vick; five dwelling-houses, Hoyal Road, for R. Meech; dwelling-house, Harbour Hill Road, for W. G. Crane and Sons; dwelling-house, Rosemary Road, for E. J. Bailey; bakehouse, rear 156 Ashley Road, for R. M. Denning; two dwelling-houses, Kingston Crescent, for A. J. Dacombe; addition to 5 Layton Road, for S. J. Wareham; garage, rear "The Blandford Arms," High Street, for H. Kendall; alterations and additions, Brownsea Cottage, Panorama Road, for W. B. Budden; garage, Banks Road, for Hawker, Mountain and Bailey; workshop and store, Albert Crescent, for J. F. Wills; garage, rear of house, Cranbrook Road, for N. E. Good; tool shed and store, rear Moorside, Hunt Road, for A. G. Brixey; garage, Pearce Avenue, for H. J. Hillman; shed, rear The Corner Stores, Ringwood Road, for H. R. Hatfield; garage, Harbour Hill Road, for J. Francis; garage, St. Clements, Hermitage Road, for Rev. B. S. White; garage, Westward, Alverton Avenue, for F. Hole; garage, Alverton Avenue, for F. Hole; additions, Alverton Avenue, for W. H. Childs; garage and tool shed, Alverton Avenue, for L. W. Harding; garage, rear Kivalek, Parkstone Road, for Dr. J. A. Walker; garage, Hatherden Avenue, for H. J. Winton; garage and workshop, Ringwood Road, for M. M. Ward; garden shed, Oaklands, Cynthia Road, for E. C. Pitcher; garage, 50 Hermitage Road, for W. J. Baker; garage, Elstow, Rossmore Avenue, for F. S. Sharp; garage, rear The Villa, Cornelia Crescent, for E. G. Loader; garage, 25 Kingsbridge Road, for Miss I. C. H. Carroll; porch addition to house, Dorchester Road, for Mrs. N. Porter; garage, Hove To, Banks Road, for S. King; proposed shelter, Castle Hill football ground, Castledene Road, for D. Haynes; garage, rear 55 Parkstone Road, for Mrs. D. O'Hara Burnand; garage, rear Darly Dale, Longfleet Road, for H. C. Bristowe; sun room and veranda, addition to house, Panorama Road, for Mrs. F. M. Fisher.

MIDLAND COUNTIES

The DUDLEY Corporation has asked the borough engineer to prepare plans for the erection of small-type houses on the Wolverton Road site.

Plans passed by the GLOSSOP Corporation: Bungalow, Dinting Road, for Mr. W. E. Goldthorpe; bungalow, Primrose Lane, for Mr. J. Thompson; additions, 151 High Street, for Mr. Thomas Brightmore.

In connection with the trunk road scheme the WARWICKSHIRE County Council recommends the construction of a by-pass at Lindon End at a cost of £20,000; a by-pass round Coventry at a cost of £64,450; and widening the road from Coventry boundary to Northants county boundary at a cost of £130,000.

The WARWICKSHIRE Education Committee reports that preliminary plans and estimates are being considered for the following schemes: Baddesley Ensor C. School, additions, £13,800; Balsall Street C. School, additions, £5,600; Kenilworth New Central School, £14,600; Solihull (Malvern Hall) High School for girls, £41,472, and Snitterfield C. School, additions, £800.

The Highways Committee of the WARWICKSHIRE County Council recommends that the Stratford-on-Avon Corporation be informed that the County Council will not agree to contribute more than £7,000 towards the proposed new bridge over the River Avon, and suggests that, as the estimated expenditure has risen from £20,000 to £60,000, the whole matter should be reconsidered to ascertain if the needs of the situation warrant the large expenditure now involved.

The DUDLEY Education Committee has now adopted the following scheme for the provision of new schools and alterations to school premises in the borough: Temporary school, Brewery Fields, £2,050; new school, Dudley Wood, £7,455; park school extensions, £10,000; new school, Brewery Fields, £17,350; new school, Blower's Green Road, £28,100; new school, Priory estate, £12,000; new school, Simms Lane, Netherton, £7,600; new school, Halesowen Road, £12,915.

Plans passed by the DUDLEY Corporation: House, Holly Hall, for Mr. J. H. Greenaway; workshop, Hope Street, for Messrs. A. Leache and Son; four houses, Tansley Hill Road, for Mr. J. F. Homer; conversion of warehouse into seven shops and three offices, Union Street, for Mr. H. L. Builder; house, Tansley Hill, for Messrs. Roberts Bros.; house, Stourbridge Road, Holly Hall, for Mr. J. Cotton; dairy, Watsons Green Road, for Mr. R. J. Turner; shop, Market Place, for Peacock Textile Co.; shop and house, new road, on Bowling Green Housing Estate, for Miss A. Smith; business premises, King Street and Churchfield Street, for Messrs. Moule and Sons; works' canteen, Pear Tree Lane, for Messrs. John Thompson, Ltd.

NORTHERN COUNTIES

The BOLTON Education Committee is to erect a senior school for 720 scholars at Whitecroft Road.

The BOLTON Corporation has received sanction to borrow £23,718 for the erection of fifty-eight houses in Cameron Street and Hamilton.

The MANCHESTER Education Committee is to extend Ducie Avenue central school at a cost of £16,214.

Two new bathrooms and dressing-rooms are to be included in a scheme of improvement at the underground public convenience in Talbot Square, BLACKPOOL. The proposals involve an expenditure of about £14,000.

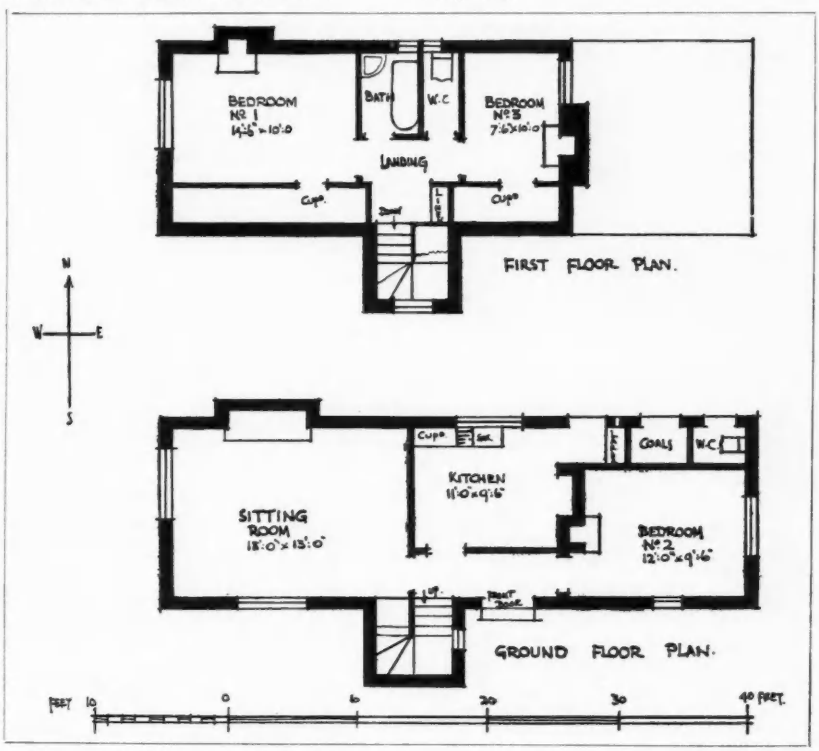
The BIRKENHEAD Corporation has instructed the borough engineer, in consultation with the medical officer of health, to prepare plans and specification for the erection of a branch clinic on the Albany Road site.

The LEEDS Corporation is seeking sanction to borrow £50,350 for the erection of forty-eight houses on the Dewsbury Road Estate and sixty-two houses and forty-four flats on the Westfield Housing Estate.

Plans passed by the BIRKENHEAD Corporation: Two houses, Hesketh Avenue; house, Sparks Lane, Thingwall; workshop, rear of Thompson Street and Fairfax Road; alterations and additions, 124 Grange Road; alterations to business premises, 188 to 192 Grange Road; two houses, Village Road; four houses, Prenton Road; two houses, Devonshire Road.

At a meeting of the SHEFFIELD Corporation Estates Committee, the city architect's layout plan for the erection of 260 houses on the Greenhill Estate was approved. Authority was given for tenders to be obtained for the erection of a small section of these houses as a first instalment. The city architect was also authorized to obtain tenders for a further 145 houses on the Longley Estate.

Plans passed by the MANCHESTER Corporation: Additions to factory, Grosvenor Street and Barlow Street, Chorlton-upon-Medlock; hotel, Kingsway and Moseley Road, Rusholme; residential hotel and flats, Wilmslow Road and Cromwell Range, Rusholme; alterations, "Railway Inn," 55-57 Chapel Street and Congon Street, Ancoats; rebuilding "Birch Arms" Hotel, Gorton Lane, West Gorton; alterations to Star Cinema, 133 Great Ducie Street; additions to paper works, Irkdale Street, Collyhurst; gymnasium to club, Elizabeth Street, Cheetham; additions "Red Lion," Wilmslow Road, Withington; eight houses, Sandhurst Avenue, West Didsbury; extension to school, Wellington Road, Withington; ten houses, Wellington Road, Fallowfield; four shops and houses, Burnage Lane, Burnage; factory, Devonshire Street, Ardwick; office to Victoria Cinema, Varley Street, Miles Platting; veranda to cinema, Oak Bank, Harpurhey.



House at Jordans, near Beaconsfield. Designed by Douglas Rowntree. Ground- and first-floor plans. The predominant feature of the exterior is the heather-thatched roof, and of the interior, the provision of a maid's bedroom on the ground floor, making the domestic quarters self-contained.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½*
B	Bangor ..	N.W. Counties	1 5	1 0½
A_2	Barnard Castle	N.E. Coast	1 6	1 1½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_2	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
$1\frac{1}{2}$	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.			£0	11	6
Thames ballast, per yd.			0	10	0
Pit gravel, per yd.			0	15	0
Pit sand, per yd.			0	12	6
Washed sand, per yd.			0	13	0
Screened ballast or gravel, add 10 per cent. per yd.					
Clinker, breeze, etc., prices according to locality.					
Portland cement, per ton			£2	8	0
Lias lime, per ton			2	0	0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.					
Transport hire per day:					
Cart and horse	£1 3 0	*Trailer*	£0	15	0
3-ton motor lorry	3 15 0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4 0 0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. 0 1 3
PLANKING to excavations, per ft. sup. 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
IF left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. . 0 2 1
DO. 6 in. thick, per yd. sup. . . 0 2 10
PUDDLING, per yd. cube 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 2 3 0
DO. 6-2-1, per yd. cube 1 18 0
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.
LIAS-LIME CONCRETE, per yd. cube . £1 16 0
BREEZE CONCRETE, per yd. cube . 1 7 0
DO. in lintels, etc., per ft. cube . 0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube 0 3 0
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.		£0	0	10
DO. 6 *in., per ft.*		0	1	3
DO. 9 *in., per ft.*		0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.		0	5	6
DO. 6 *in., per yd.*		0	8	0
Portland cement and sand, see "Excavator" above.				
Leadwool, per cwt.		£2	0	0
Gaskin, per lb.		0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . . 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3
Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.		£4	5	6
Flettons, per M.		2	12	6
White facing bricks, per M.		5	0	0
Multi-coloured facings, per M.		7	7	9
Best red facings, per M.		7	7	9
Rubbers, 9¼ in., per M.		12	0	6
Staffordshire blue, per M.		9	5	0
Firebricks, 2½ in., per M.		9	5	0
Glazed salt, white, and ivory stretchers, per M.		21	10	0
DO. *headers, per M.*		20	10	0
Colours, extra, per M.		5	10	0
Seconds, less, per M.		1	0	0
Cement and sand, see "Excavator" above.				

Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod			
HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra.	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:				
Whitbed, per ft. cube		£0	4	6
Basebed, per ft. cube		0	4	9
Bath stone, per ft. cube		0	3	0
Usual trade extras for large blocks.				
York paving, av. 2½ in., per yd. super.		0	11	0
York templates sawn, per ft. cube		0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.		0	2	6
Cement and sand, see "Excavator," etc., above.				

HOISTING and setting stone, per ft. cube £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.
PLAIN face Portland basis, per ft. sup. £0 2 8
DO. circular, per ft. sup. . . . 0 4 0
SUNK FACE, per ft. sup. . . . 0 3 9
DO. circular, per ft. sup. . . . 0 4 10
JOINTS, arch, per ft. sup. . . . 0 2 6
DO. sunk, per ft. sup. . . . 0 2 7
DO. DO. circular, per ft. sup. . 0 4 6
CIRCULAR-CIRCULAR work, per ft. sup. 1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run . . . 0 1 1
DO. circular, do., per ft. run . . 0 1 4
HALF SAWING, per ft. sup. . . 0 1 0
Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.
SETTING 1 in. slate shelving in cement, per ft. sup. £0 0 6

RUBBED round nosing to do., per ft. lin. £0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed 1 7 6
YORK SILLS, W. & T., ft. cub. fixed . 1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup. 0 1 3
DO. 2½ in. thick, per ft. sup. . . 0 1 6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies			£14	0 0
Countess			23	0 0
Duchess			32	10 0
Old Delabole	*Med. Grey*	*Med. Green*		
24 in. × 12 in.	£42 11 3	£45	1	0
20 in. × 10 in.	31 4 3	33	0	6
16 in. × 10 in.	20 18 0	22	4	9
14 in. × 8 in.	12 1 0	12	16	3
Green Randoms, per ton			8	3 9
Grey-green do., per ton			7	3 9
Green peggies, 12 in. to 8 in. long, per ton			5	13 9
In 4-ton truck loads, delivered Nine Elms station.				
Clips, lead, per lb.			£0	0 6
Clips, copper, per lb.			0	2 0
Nails, compo, per cwt.			1	6 0
Nails, copper, per lb.			0	2 2
Cement and sand, see "Excavator," etc., above.				
Hand-made tiles, per M.			£5	18 0
Machine-made tiles, per M.			5	8 0
Westmorland slates, large, per ton			9	0 0
DO. *Peggies, per ton*			7	5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0

WESTMORLAND, in diminishing courses, per square 6 5 0
CORNISH DO., per square 6 3 0
Add, if vertical, per square approx. . 0 13 0
Add, if with copper nails, per square approx. 0 2 6
Double course at eaves, per ft. approx. 0 1 0
SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms		6 7 0
Grey-green do.		5 9 0
Green peggies, 12 in. to 8 in. long		4 13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square 3 17 6
DO., machine-made do., per square . 3 7 6
Vertical Tiling, including pointing, add 18s. 0d. per square.
FIXING lead soakers, per dozen . £0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square . . 0 10 0
LABOUR only in laying slates, but including nails, per square . . 1 0 0
See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube . . 0 4 6
DO. framed in floors, roofs, etc., per ft. cube 0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube . . 0 8 6
PITCH PINE, add 33⅓ per cent.
FIXING only boarding in floors, roofs, etc., per sq. 0 13 6
SARKING FELT laid, 1-ply, per yd. . 0 1 6
DO., 3-ply, per yd. 0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq. . 2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run . 0 0 4½
DO. 9 in. wide and over per ft. sup. . 0 1 2

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CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1½ in. thick, per yd. sup.	0	12	0
Maple 1½ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¾ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
DO. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour (plus allowances in London only);* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅞ in., per ft.	0	0	6½
DO. ½ *in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	4	3
DO., *boiled, per gall.*	0	4	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, per yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ⅜ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	5½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	8½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, OCTOBER 16

R.I.B.A., 9 Conduit Street, W.1. Statutory Examinations for Certificates of Competency to act as District Surveyor under the London Building Acts and Building Surveyor under Local Authorities. Till Friday, October 18. **6.15 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "Copenhagen, Past and Present." First of a course of three Public Lectures by J. H. Helweg. (Lantern illustrations.) **5.30 p.m.**

THURSDAY, OCTOBER 17

ARCHITECTURE CLUB. At the London School of Economics. Supper Discussion. Report as to arrangements. **5.45 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ecclesiastical Metalwork." By L. O. Faraker. **12 noon.**

FRIDAY, OCTOBER 18

TRADES TRAINING SCHOOLS. Presentation of Prizes at the Carpenters' Hall, London Wall, E.C.2. **8 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to Carlyle's House and Museum, 24 Cheyne Row, S.W.3. **2.30 p.m.**

SATURDAY, OCTOBER 19

Sunrise 6.30. Sunset, 5.0.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. Visit to Mount Pleasant Letter Office: Conveyors v. P.O. Tube Railway.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Royal Veterinary College, Camden Town. Meet at Main Entrance. **2.45 p.m.**

MONDAY, OCTOBER 21

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. 12 noon. "Architecture." By L. O. Faraker. 3 p.m. **12 noon.**

UNIVERSITY OF LONDON, University College, W.C.1. "The Elizabethan House." By Arthur Ashmole. **2 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Council Meeting. **4.30 p.m.**

TUESDAY, OCTOBER 22

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. 12 Russell Square, W.C.1. Dinner at Engineers' Club, Manchester. **7 p.m.**

WEDNESDAY, OCTOBER 23

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visits to Carreras Tobacco Factory, Mornington Crescent, N.W.1. At 11 a.m., 2 p.m., and 3.30 p.m. Only fifteen persons can attend in each party. Please state which time is preferred. **11 a.m., 2 and 3.30 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "Copenhagen, Past and Present." Second of a course of three Public Lectures by J. H. Helweg. (Lantern illustrations.) **5.30 p.m.**

THURSDAY, OCTOBER 24

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. Inaugural address by Col. Sir T. F. Purves, O.B.E. (President). **6 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visits to St. Paul's Cathedral. Canon Alexander will speak on "How St. Paul's has been Preserved." Meet inside main entrance. **2.30 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Origins of Architecture: II.—Roman." By Cecil Hallet, B.A., F.S.A. **12 noon.**

R.I.B.A., 9 Conduit Street, W.1. Meeting of Literature Standing Committee.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Ladies' visit to Messrs. Waring and Gillow's Showrooms, Oxford Street, W. **2.45 p.m.**

FRIDAY, OCTOBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chinese Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

SATURDAY, OCTOBER 26

R.I.B.A., 9 Conduit Street, W.1. Exhibition until November 2 of Designs of Students of Schools of Architecture recognized for exemption from R.I.B.A. Intermediate Examination.

WEDNESDAY, OCTOBER 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "Copenhagen, Past and Present." Last of a course of three Public Lectures by J. H. Helweg. (Lantern illustrations.) **5.30 p.m.**

FRIDAY, NOVEMBER 1

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Gothic Woodwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Meter and Instrument Section Meeting. **7 p.m.**

SATURDAY, NOVEMBER 2

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section—Sculpture." By T. F. WILSON, F.R.S.A.I. **3 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Mears and Stainbank, Church Bell Foundry, 32 Whitechapel Road, E.1. Stations, Aldgate and Aldgate East. Party limited to 20 members only. **2.45 p.m.**

MONDAY, NOVEMBER 4

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last date for entry for R.I.B.A. Final Examination.

R.I.B.A., 9 Conduit Street, W.1. Inaugural Meeting. The portrait of Mr. Walter Tapper, A.R.A., F.S.A., painted by Sir William Orpen, R.A., will be presented to the Royal Institute, and the Medals and Diploma for a London building completed between 1926–1928 will be presented to Messrs. Easton and Robertson, F.F.R.I.B.A.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Informal Meeting. **7 p.m.**

TUESDAY, NOVEMBER 5

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Practice Standing Committee.

WEDNESDAY, NOVEMBER 6

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Art Standing Committee and of the Board of Architectural Education Committee.

WESTMINSTER SCHOOL HALL (entrance in Dean's Yard). "Mystery Ships." By Rear-Admiral Gordon Campbell, V.C., D.S.O. Chairman, Viscount Burnham, G.C.M.G., C.H. Admission, 2s. 6d. **5.30 p.m.**

THURSDAY, NOVEMBER 7

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting.

R.I.B.A., 9 Conduit Street, W.1 Meetings of the Board of Architectural Education Committee and of the Board of Architectural Education Prizes and Scholarships Committee.

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "The Restoration of an Ancient Castle to Modern Use." By Sir Charles Allom, F.R.S.A. **7.30 p.m.**

FRIDAY, NOVEMBER 8

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Modern Incandescent Lighting in Kinema Studios," by W. H. Villiers and S. G. Double. **7 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Intermediate Examination until Thursday, November 14.

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Coal and its Combustion." By Andrew McCulloch, M.SC.TECH.A.I.C. **7 p.m.**

SATURDAY, NOVEMBER 9

Sunrise, 7.6. Sunset, 4.21

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to India House, Aldwych. Architect, Sir Herbert Baker, A.R.A., F.R.I.B.A. Meet at India House, at 2.45 p.m. **2.45 p.m.**

MONDAY, NOVEMBER 11

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Informal Meeting. **7 p.m.**

WEDNESDAY, NOVEMBER 13

WESTMINSTER SCHOOL HALL (entrance in Dean's Yard). "My Solo Flight to Australia." By Squadron-Leader Hinkler, A.F.C., F.S.M., R.A.A.F. Chairman, Col. The Master of Sempil, A.F.C. **5.30 p.m.**

THURSDAY, NOVEMBER 14

THE ARCHITECTURE CLUB. Dinner at the Savoy Hotel.

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Science Standing Committee.

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "Woodworking Machinery." By Stafford Ransome, M.INST.C.E. **7.30 p.m.**

FRIDAY, NOVEMBER 15

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. "Romance of Lead in Industry." By E. Holden, F.COLL.H. **3 p.m.**

MORLEY COLLEGE, Westminster Bridge Road, S.E.1. "Housing." By E. D. Simon, M.P. **8 p.m.**

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Smoke and Health." By John S. Taylor, M.D., D.P.H.

SATURDAY, NOVEMBER 16

Sunrise, 7.19. Sunset, 4.10.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Informal Visit to Houses of Parliament. Meet at Norman Porch, Victoria Tower, at 2.30 p.m. **2.30 p.m.**

MONDAY, NOVEMBER 18

R.I.B.A., 9 Conduit Street, W.1. Meeting of Executive Committee. 4 p.m. General Meeting, with Paper by Alan E. Munby, M.A., F.R.I.B.A., on "The Design of Science Buildings." 8 p.m. **4 p.m.**

WEDNESDAY, NOVEMBER 20

WESTMINSTER CITY SCHOOL, Palace Street, Victoria Street, S.W.1. "My Experiences of Magic in West Africa." By Lady Dorothy Mills. **5.30 p.m.**

THURSDAY, NOVEMBER 21

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "Mouldings—Their Proportion and Place in Design." By E. J. Warne. **7 p.m.**

FRIDAY, NOVEMBER 22

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Smokeless Fuels." By William Gibson, M.SC.TECH.A.I.C. **7 p.m.**

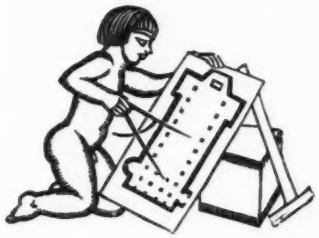
WEDNESDAY, NOVEMBER 27

WESTMINSTER CITY SCHOOL, Palace Street, S.W.1. "By Car From Nile to Niger and Across the Sahara." By Owen Tweedy. **5.30 p.m.**



THE CITY IN THE TREES: FROM THE TOWER OF "No. 55 BROADWAY."
A fragment, looking N.E., of the wonderful panorama of London from the top of the Underground building, St. James's Park, illustrated and described in this issue. The parapet is on a level with the cornice immediately below the clock-face of Big Ben.

THE ARCHITECTS' JOURNAL



WEDNESDAY, OCTOBER 16, 1929

A GOVERNMENT OFFICE COMPETITION STALEMATE

"It would be an ideal arrangement if official architects could be allowed to enter for such a competition, provided that they forfeit a part of their salaries during the period in which their services are withdrawn from routine work"

THE relationship between "official" architects and private practitioners is the subject of a controversy which appears to be growing more acute every day. It will be remembered that a few months ago the Architecture Club instituted a public debate upon this matter, and gave to H.M. Commissioner of Works of the late Government an opportunity to justify, if he could, the growing practice of allowing important public buildings to be designed by members of his own technical staff. It cannot be said that this debate was conclusive, for the disputants on either side seemed more concerned to discuss the professional aspects of the question than the æsthetic. The main object of architectural activity is to erect well-designed buildings; and if this object is accomplished the agency responsible for their erection, whether public or private, acquires a status which is unassailable. The fact is worth remarking that at periods of high artistic achievement there was very little difference between the standard of architecture controlled by the State and that which owed its origin to private agencies. It has recently been established beyond doubt that nearly all the noble buildings which bear witness to the splendour of Roman civilization were designed by official architects.

Many people would be found to agree that, in recent years especially, the *average* standard of official architecture is higher than the *average* of private practitioners; but, in the case of a great public building, we require the very best talent which can be obtained by whatever procedure may be at our disposal. The architectural staff attached to H.M. Office of Works is a highly competent one, and, in particular, the numerous post offices and telephone exchanges designed by its members in recent years are pleasantly-designed, sensible buildings in a traditional English style. Nevertheless, it must be insisted that at the present time the total weight of architectural talent outside the ranks of Civil Servants is overwhelmingly superior to that within it. And whenever a great public building is erected, even if it is to be occupied by a great department of State, the case for putting the designs up to public competition seems unanswerable.

The important Government office block to be erected between Whitehall and the Embankment was the subject of an architectural competition before the war, and Mr. E. Vincent Harris was awarded first place. It is, however, rumoured that, in spite of this, the technical staff at H.M. Office of Works has been instructed to prepare the plans. If, as is contended, the original designs need modification, Mr. Vincent Harris is surely competent to modify them in accordance with the requirements of the offices concerned.

The system of public architectural competitions cannot be successfully upheld if it too frequently occurs that, on some pretext or other, the designs placed first by the assessor are set aside. If the modifications suggested can be superimposed upon the original plan, then it seems only just and proper that Mr. Vincent Harris be employed forthwith as the architect of the new building. If, on the other hand, the "architectural programme" has been altered to such an extent that entirely new plans are required, rather than that these latter should be prepared by the staff of H.M. Office of Works a new competition should be held, in which, however, Mr. Vincent Harris should be given a privileged position. This result could be achieved if the competition were held in two stages, from the first of which Mr. Vincent Harris should be excused, his design being submitted to the assessor with those of the limited number of selected entrants for the last round of the competition. This would seem a more desirable arrangement than the holding of a limited competition, to which many objections can be raised. In order that full justice might be done to all parties concerned, it would be an ideal arrangement if official architects could be allowed to enter for such a competition, provided that they forfeit a part of their salaries during the period in which their services are withdrawn from routine work. By this means their ability to design a great building could be put to a true test.

THE CITY IN THE TREES: FROM THE TOWER OF No. 55 BROADWAY.
A fragment, looking N.E., of the wonderful panorama of London from the top of the Underground building, St. James's Park, illustrated and described in this issue. The parapet is on a level with the cornice immediately below the clock-face of Big Ben.

NEWS & TOPICS

GEORGE HICKS ON HOUSING

IT may confidently be expected that the Government, when in a few weeks' time it has settled certain outstanding affairs in connection with foreign politics, will be devoting itself in real earnest to matters nearer home; and of these none is more important or pressing than the housing question. I was much interested, therefore, to read a pamphlet by Mr. George Hicks, General Secretary of the Amalgamated Union of Building Trade Workers, who advocates a bold practical housing policy. As is natural in one who has been brought into close contact with those conditions of housing of which every Englishman has cause to be ashamed, one can sympathize with the note of indignation he introduces into his statement. The definition of the word "slum" is a somewhat elastic one, but there can be little doubt that if we adopt a decent standard of living as the criterion by which to judge the number of people who are properly housed, those who fall below this standard, namely, the slum-dwellers, are not far short of the three millions estimated by Mr. Hicks.

*

It is but natural that Mr. Hicks should draw attention to the paradoxical situation in which we find a great shortage of houses and at the same time large numbers of unemployed in the building industries. And he pleads for the establishment of a better understanding between those entrusted with housing policy and the leaders of the industries concerned in carrying it out. He also makes the surprising statement that, with sufficient co-ordination between manufacturers of building materials, master builders, and building operatives, as many as two hundred thousand houses per annum could be erected without undue strain on the industry. He maintains that we have the means, the knowledge, housing designs in infinite variety, the experience of well-tried building materials, and the necessary skilled labour to ensure that every man, woman, and child is housed in good, durable, and beautiful dwellings. With regard to the slums he advocates a new crusade. He would first simplify the procedure in regard to positive action on the part of local authorities; next, he favours a movement to decentralize industry and to remove factories and workshops and industrial concerns, generally to places where new housing conditions can be established; and lastly, he would like a campaign of enlightenment among the slum-dwellers themselves, with the object of inspiring them with an active desire for a modern house with all modern conveniences.

"LUXURY" AT CAMPDEN HILL

It always seems that the more secluded and least spoilt districts of London are those first to be selected for development. This is so because so much that has been kept pleasant and undefiled has been the property of a generation whose London was a place of stucco and quiet squares and old trees. Upon these—now largely impoverished—people, death duties are so heavy an imposition that the assets that lie in their London estates must be increased by redevelopment, or remain unrealizable. Thus it happens that Campden Hill—unspoilt, pleasantly residential, quiet, untroubled Campden Hill—is to be rebuilt with *luxury flats* and all the abominations of Mayfair, in order that it may yield money as well as sweetness and light.



From the daily Press: Titsford Church, near Tavistock, which is to be removed as the result of a local poll. *Good!* It will be rebuilt on a new site. *Why?*

But, on the other hand, there is no reason why, if the decision to rebuild, the district regards the development in a sufficiently unified way, and remembers how the beauties of Belgravia were achieved without loss; how Hampstead Garden Suburb was built *among* and not over the trees; and how much of grandeur and nobility may be brought about by a judicious placing of good buildings over as varied and delightful a site as is Campden Hill; if, I say, it remembers these and other things, why should we regret what may be done? Only let the owner of this piece of London regard his responsibilities to the new Campden Hill as he has loved the old, and be too sure of his power to create lasting good to be led away into speculation, or into the fictitious atmosphere of *luxury* development. There are no luxuries to be compared with trees and grass and open spaces. No flat is a luxury. But it may be by so much less a dehumanizing agent if it looks over the plane trees of a new London square.

HOUSING IN NEW YORK

The New York State Board of Housing, a body that is charged with the administration of the State Housing Law and the bettering of housing conditions throughout the area, reporting to the Legislature on the existing conditions in the State and City of New York, discloses a state of affairs which we have not been in the habit of associating with the present prosperity of the United States. When congestion was first recognized as a national calamity it was discovered that very many cities and towns were without any form of building code; that others were provided for by codes so out-dated as to be ineffectual; and

that only the few made any provision for light, air, and hygiene over and above the regulations governing mere stability and construction.

*

It may be imagined that the non-existence of corrective ordinances over a long period of rising prosperity has left everywhere a legacy of terrible conditions—insanitary and overcrowded dwellings. Moreover, it is definitely stated in the report that "even on free land the most modest apartment in a new building with *modern conveniences* must rent for more than the actual rental price of fully 65 per cent. of the apartments on Manhattan." From this it may be gathered that the population of New York City is predominantly poor, and predominantly under-housed. Large co-operative schemes are being undertaken for the type of tenant just above this lowest class, and building is so rapid that a small leeway is observable in the worst quarters, which are being evacuated by barely perceptible degrees. But, as in London, the re-housing of the lowest classes becomes a form of State philanthropy, and its exercise a small shovel at work on a very large muck-heap.

"THESE ELECTRICAL TIMES"

Quoth *The Electrical Times* :—

We do not remember any particular gesture of sympathy or friendliness for electrical men on the part of architects in general; they have done a great deal to impede the progress of electricity, and occasional joint discussions do not seem to have established any *entente cordiale*. Just why *The Architects' Journal*, for instance, should elect itself to the protectorate of bucolic beauty and why vast tracts of country adorned by no architectural masterpiece concern them we do not know. Our contemporary indulges in some magnificent writing on the subject. After expressing its passionate love for the pastoral *mise en scene* where "a feeling of antiquity hangs round the high and windy fields and the harvest is cut with scythe or reaphook and the sheaves are bound by hand," it continues thus :—

"Sheep wander through the hills as they wander through the Psalms of David, and men are much in company with dogs and horses and birds. In some lonely valley the wooded slope is overgrown with long moss like yellow hair, falling to shroud the tree trunks and the branches, and lying over the primeval boulders; except where a thin white stream of water drops and, echoing some old name, keeps its ferny channel green; it is the country of the Morte d'Arthur, and we deny all science and all engineering and all industry the right to effect the death of Wales."

How we wish that we could write such splendid literature on the subject, say, of the exquisite creations of British architects in our great cities. That is a matter that concerns them and concerns us, though our admiration would not be lavished so much upon the superficial loveliness of their handiwork as upon certain constructional details that date from the Morte d'Arthur and account for his preferring to be found dead in the country.

*

This edifying extract is a reply to the JOURNAL's criticism of electric standards (leading article, September 25). It seems our contemporary is out for Electricity at All Costs, even the cost of despoiling Britain's most beautiful scenery. But suppose this electrically enamoured journalist in the chair of an unskilful dentist, who bores with his electric drill through a live nerve, will he remain an admirer of electric power for all occasions ? Similarly, the architect (or any normal sort of man who likes his countryside) has optical nerves, and he equally resents the careless handling of electric devices—these standards which litter the landscape, to wit. He thinks many of the power schemes should not be undertaken till the scientific experts are ready with an economical means of burying their cables. The fact is that Science, which has brought to birth so many public nuisances, must recognize in future its responsibilities; what is useful to one man must be made endurable to the twenty men, his neighbours.

RIMA "GRADUATES"

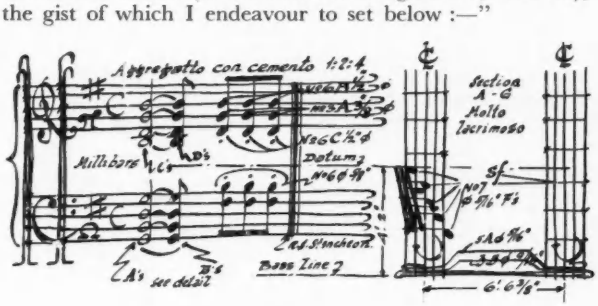
The historical association between architecture and sculpture is such an intimate one that members of our own profession cannot be indifferent to the fate of any statue, and especially is our interest aroused when we hear that Epstein's Rima now shares a distinction which in recent years has only been conferred upon the monument to Peter Pan designed by the late George Frampton, R.A.; for both have now been tarred and feathered, the illustrious Rima having only, as it were, graduated last week. As both these deliberate transformations of works of art have occurred in the same locality, it is not unreasonable at least to conjecture that they are due to the same agency. And if this assumption is correct, it seems to support a conclusion capable of being derived from independent sources, namely, that the same people who dislike the "pretty-pretty" type of sculpture, as represented by the Peter Pan monument, also dislike the "ugly-ugly," if by analogy one may coin an expression to describe the work of the diametrically opposite school.

*

That is but one conclusion to be derived from this tarring and feathering business; but I had been startled on being informed by a very knowledgeable person that one may place a quite different interpretation upon this phenomenon. This ingenious critic affirmed that it was a sincere admirer of Epstein's work, who sought to give to his Rima a new artistic distinction. Obviously there is nothing æsthetically disagreeable in the texture of tar as such; while in the case of a statue situated in a bird sanctuary the addition of feathers seems peculiarly appropriate and might cause to be established between Rima and the birds a happier relationship than exists at present. It may be hoped, therefore, that the officials of the Office of Works, who, we understand, are contemplating the removal of this recent addendum to Epstein's design, may be induced to stay their hands and consider carefully whether the interests of art are not best served by allowing the tar and feathers to remain. ASTRAGAL

A CONCRETE ABSTRACTION

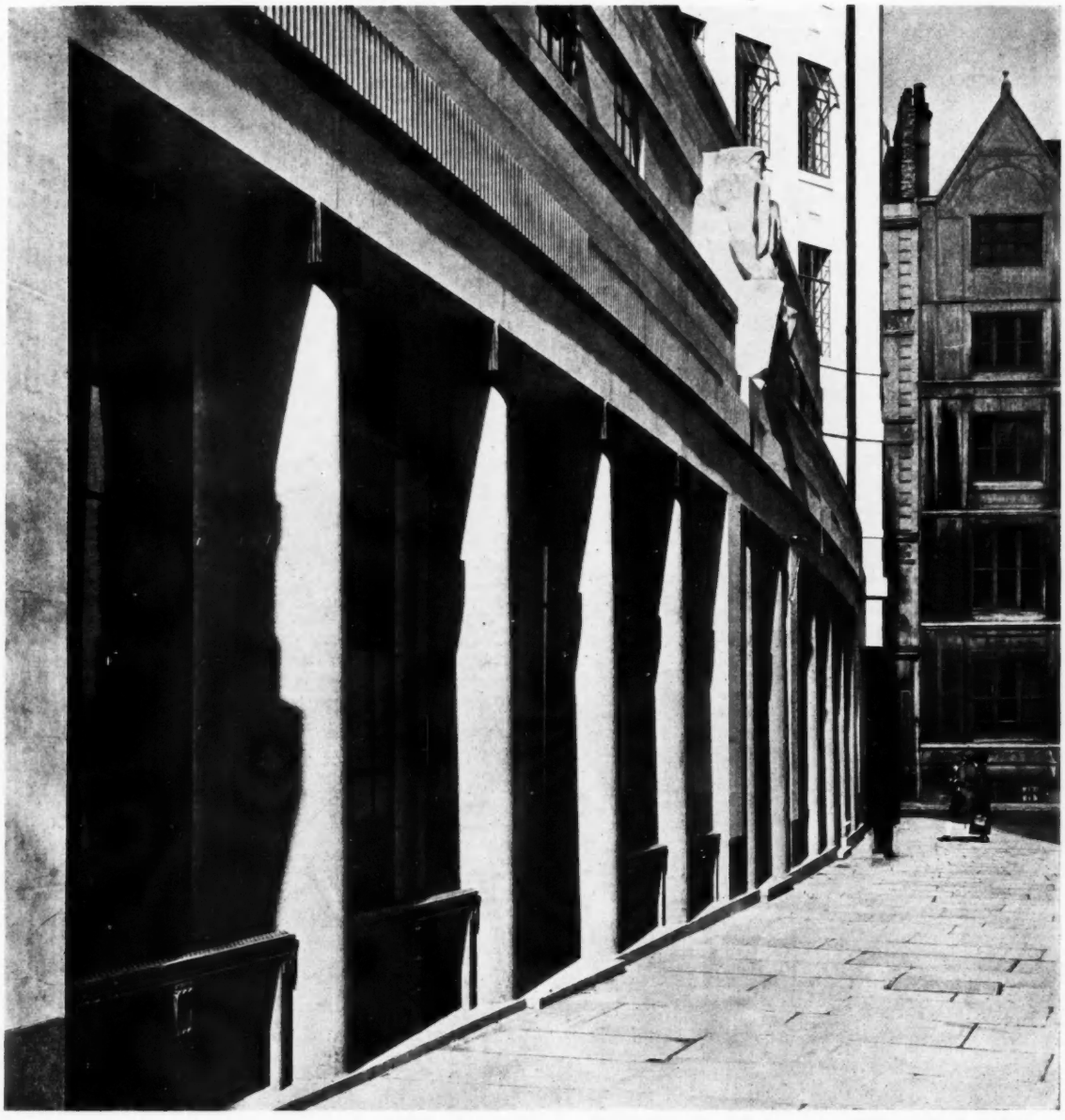
"Dear Astragal (writes a correspondent who signs himself, 'yours aggregately'),—I am not an expert on reinforced concrete design, as you might imagine on glancing at this letter; but it falls to my unhappy lot to have to unravel the machinations of other fiends who deal in this commodity. After spending many an hour at this wearisome task, I decided the other day that my artistic soul should have release from the iron bars (I mean, steel) that were imprisoning it, and I took myself to a classical concert for relaxation. That very night I dreamed a dream (it was more of a nightmare, forsooth), the gist of which I endeavour to set below :—"





Underground Headquarters, Westminster.] [*By Adams, Holden and Pearson.*

A view of the new offices of the London Electric Railways from Queen Anne's Gate. The building is nine stories high and is surmounted by a central tower having four more floors. It is set back at the seventh and ninth floors, and has a total height, including the tower, of about 174 ft. A view from the top is seen in the frontispiece.



The ground floor of the facade to Broadway (south side). The two main sculptured groups over the doorways are by Epstein and represent "Morning," shown in the illustration, and "Night," on the north facade. Of the eight sculptured panels of the Winds on the upper parts of the building, one of which is shown on the facing page, three are by Eric Gill, and one each by H. Moore, S. Rabinovitch, Alan Wyon, A. H. Gerrard, and Eric Aumonier.

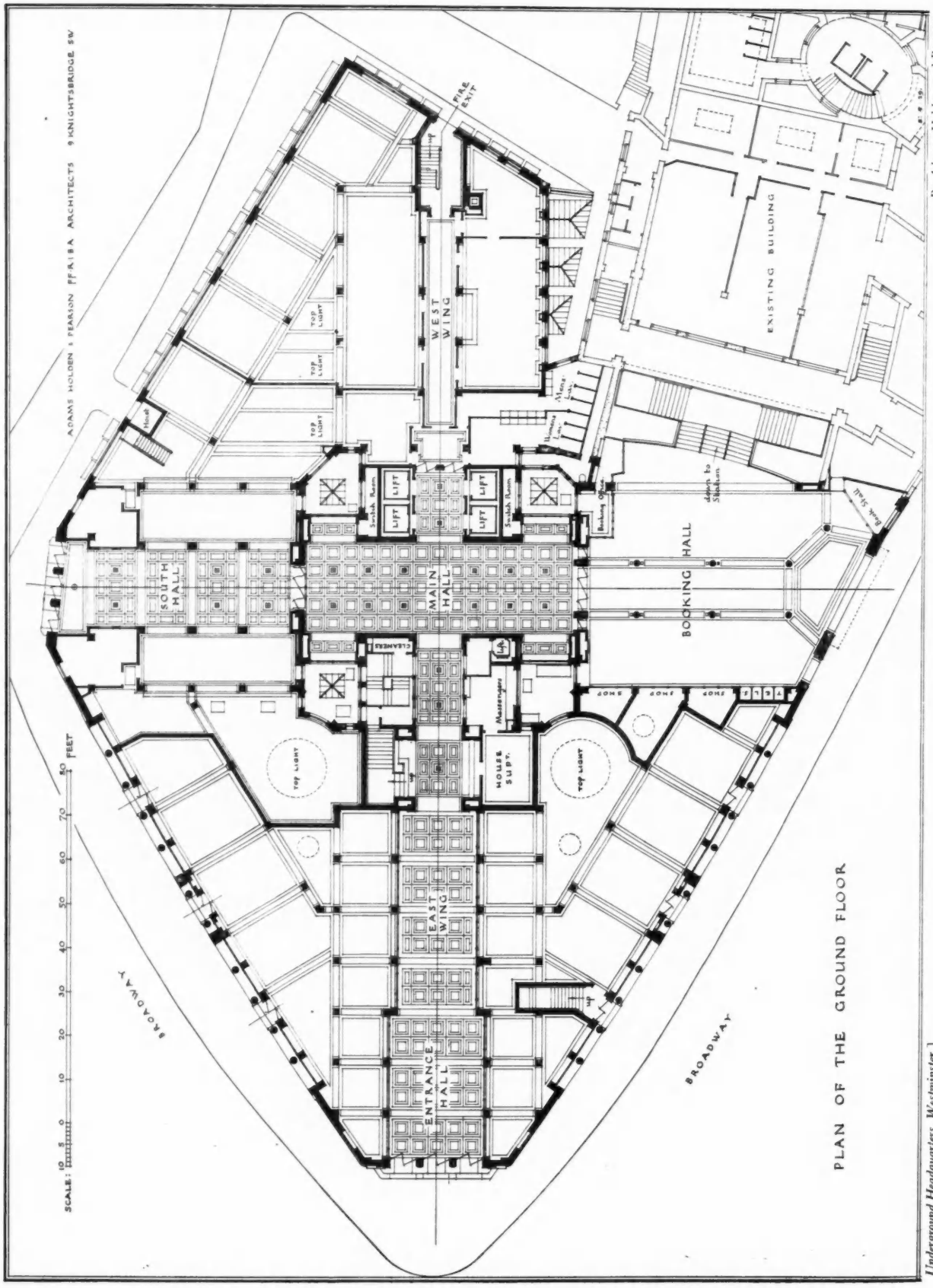
"NO. 55 BROADWAY, WESTMINSTER"

New Headquarters for the London Electric Railways at St. James's Park

DESIGNED BY ADAMS, HOLDEN AND PEARSON

THIS building has been more discussed than any other erected in London during the present year, and deservedly so. An architectural critic has reason to complain, however, that various sculptural addenda to the building have been so much in the limelight that the structure itself has not even yet received all the attention it deserves. Let us for the moment dismiss from our minds those nocturnal and diurnal interludes which have proved so disturbing, and examine for a moment the main outlines of the building and its relation to its site.

In the first instance it strikes one by its great height and the central tower, which is visible from afar. This great block of offices differs from Bush House and Adelaide House, and other similar large aggregations of offices contained within a single architectural unit, inasmuch as the whole of the accommodation provided is utilized by



Underground Headquarters, Westminster.—*By Adams, Holden, and Pearson.*

The ground-floor plan. The site is traversed by the Underground Railway, which lies just below ground level, and St. James's Park Station had to be incorporated into the plan. The office bays are set out in the form of a cross. In the centre ... tower ... the vertical circulation of lifts and the main staircase. This type of plan

the officials of one company. This is important, because it means that the building truthfully expresses a certain significant fact—namely, that there exists a business firm of such wealth and importance that its head office must necessarily occupy an enormous cubic space. In comparison with the Underground building, Bush House is an obvious sham, because it masquerades as an architectural unity; but that unity is not justified by a similar unity of close connection between the offices which are rented by a large number of different firms quite fortuitously assembled beneath the same roof.

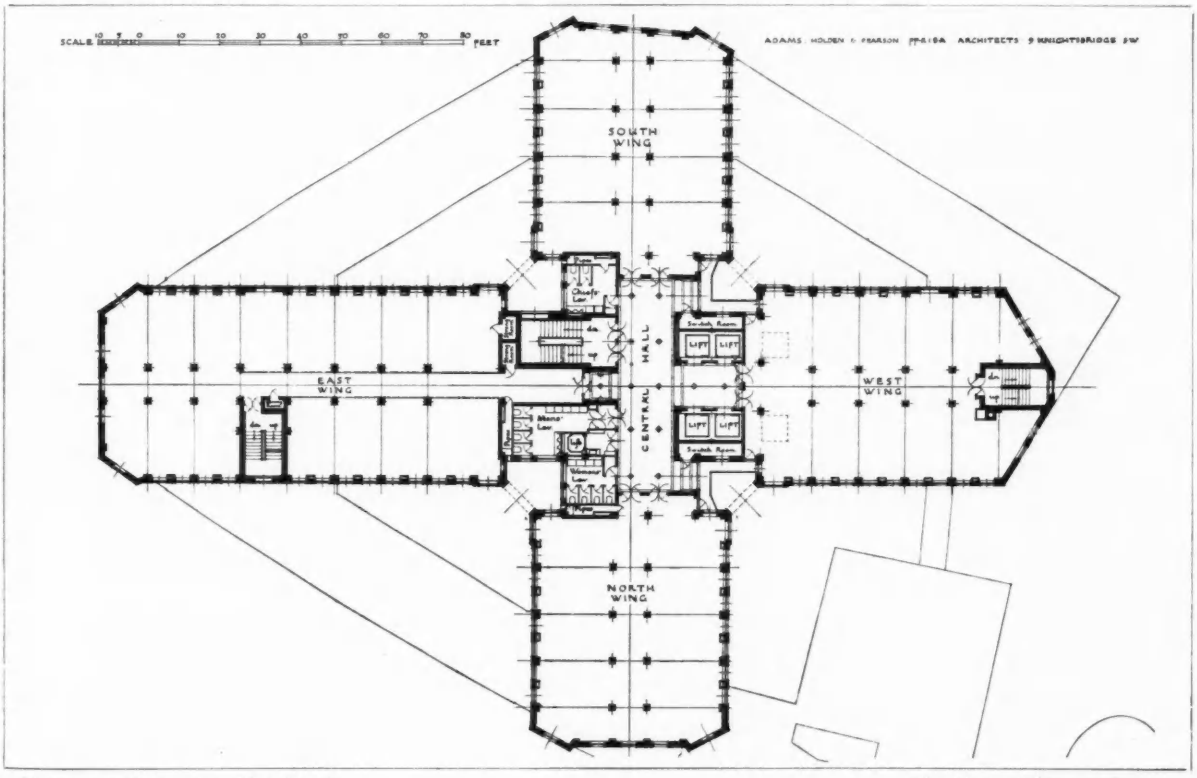
A second point to notice is that its authors are not ashamed to declare to all the world that this is really an office building inhabited by human beings of normal dimensions. Numerous small windows placed in horizontal tiers proclaim the existence of floors separating the stories from one another. Such a fact would scarcely seem worth recounting were we not gradually being familiarized with types of facade which fail to comply with the dictates of common sense in this particular matter. We have reason to be exceedingly grateful to the architects of a building so truly expressive of the twentieth-century spirit, which, however, does not exemplify the monstrous affectations of Modernist design which assume the form of vertical groups of windows enclosed in long slits of reveals deliberately ignoring the floor levels. This bad-manned architectural device, by which the designer seeks to kill the scale of the neighbouring facades, is not employed in the structure here illustrated, which, in spite of its great height, has a pleasant human quality and does not aggressively dissociate itself from the unassuming buildings by which it is surrounded.

A third very important quality in the building, which must claim a critic's attention, is the "cross" formation of its plan, which results in all the office-rooms being extremely well lit, because internal courtyards are here avoided, while obviously it is a superlatively good arrangement for the staircases, lifts, and lavatories on each floor to be placed in a central position.

It has been said that the Underground building is unfortunate in being tucked away at the junction of not very important streets; yet it may be argued that only in such a position could a building planned in this manner appear to best advantage, for it may easily be imagined that great public thoroughfares could not retain the virtues of the street formation if every building were planned as a cross. The block of offices for the London Electric Railways is an exceptional building on an exceptional site, and it can scarcely be the desire of its owners or architects that the main disposition of its parts should be repeated in structures erected elsewhere.

The detail and ornament express a remarkable intellectual vigour; the illustrations of architectural detail here reproduced all show the exercise of a constructive imagination engaged in increasing the range of ornament. The applied sculpture, by a number of very modern artists, has achieved a notoriety that is surely unworthy of it. But even if, as is affirmed in certain quarters, it is beneath criticism, it cannot seriously impair the architectural qualities of a noble and notable building.

A. T. E.



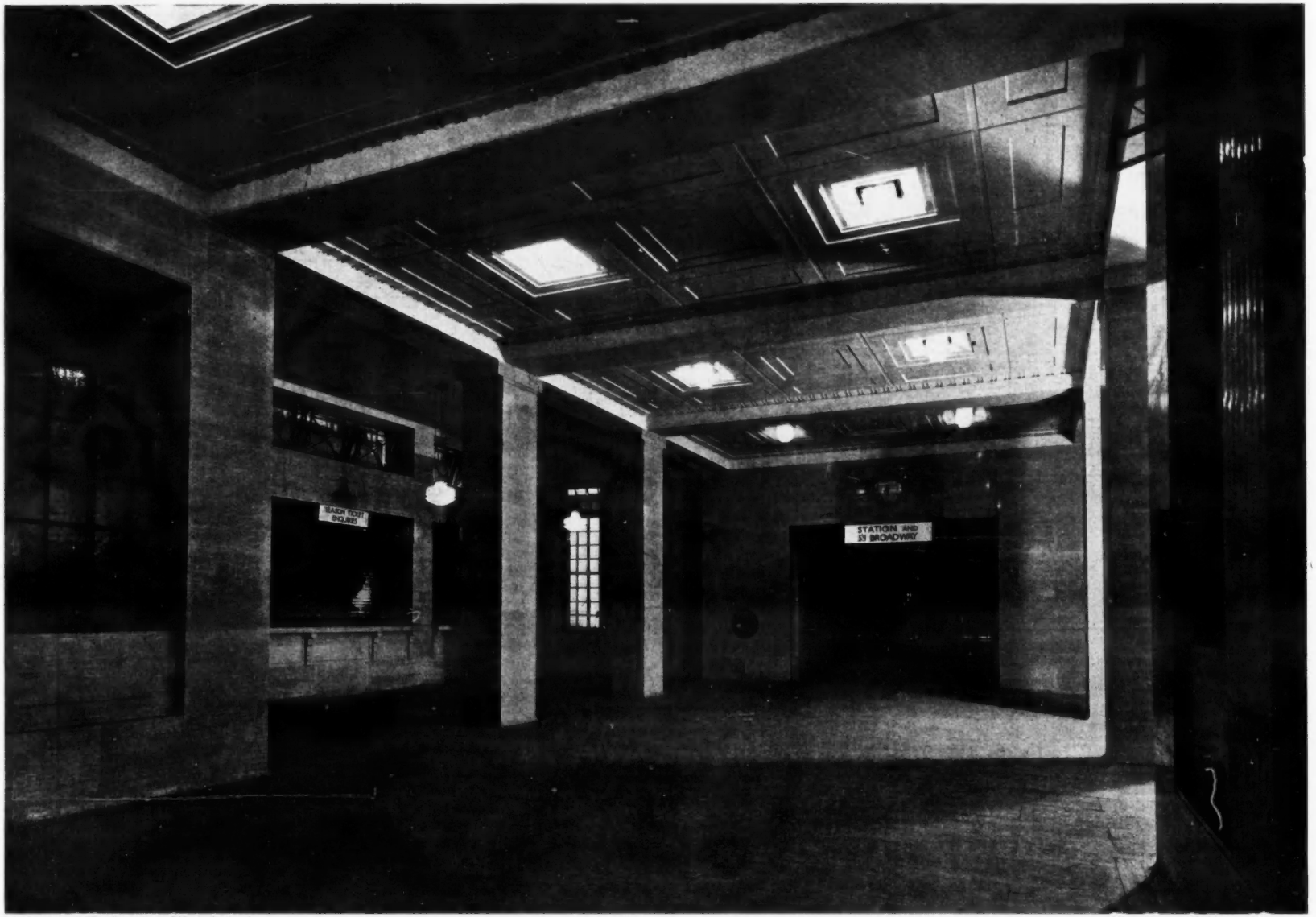
Underground Headquarters, Westminster.] [*By Adams, Holden and Pearson.*

Plan of a typical floor. The centre portion contains entrances to the four wings, lifts, lavatories, a service lobby with its own lift, and switchboard and meter rooms. Ample light is given to the centre portion by the small re-entrant bays.

The ground-floor plan. The site is traversed by the Underground Railway, which lies just below ground level, and St. James's Park Station had to be incorporated into the plan. The office bays are set out in the form of a cross. In the cen-

—By Adams, Holden, and Pearson. the vertical circulation of lifts and the main staircase. This type of plan

Underground Headquarters, Westminster.]



Underground Headquarters, Westminster. | [*By Adams, Holden and Pearson.*

In the south wing on the ground floor are the general enquiry offices for the whole of the Underground group: buses, trams and electric railways. Travertine marble has been used for the floors and walls. The doors, shutters to "season-ticket enquiries" and the dividing windows, such as that shown on the left of the photograph, are in bronze. The ordinary windows are of the steel casement type. The wheel to the left of the station doorway is for lowering the shutters of this entrance.

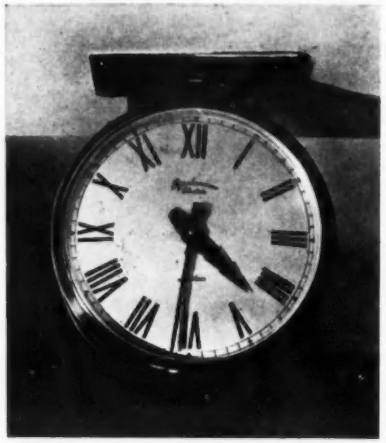
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[By Adams, Holden and Pearson.

Underground Headquarters, Westminster.]

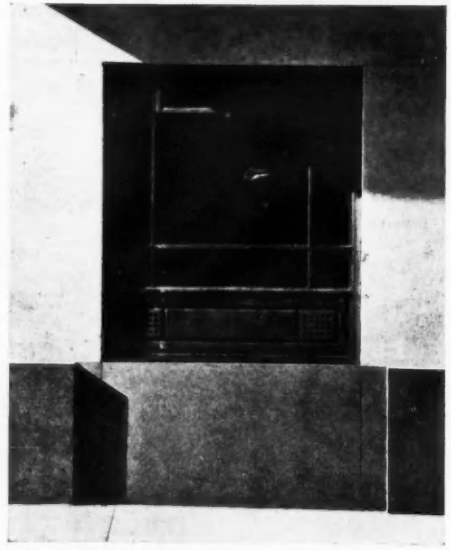
The Chairman's (Lord Ashfield's) room is on the seventh floor. The doors and panelling are in figured walnut. The walls are covered with brown tapestry; the curtains are green and gold, and the chairs are in walnut, upholstered in dark green leather. A plain dark brown carpet covers the floor. In the room are two fireplaces in mottled cream marble. One provides a setting for an Empire clock and the other for a barometer, both in gold lacquer.

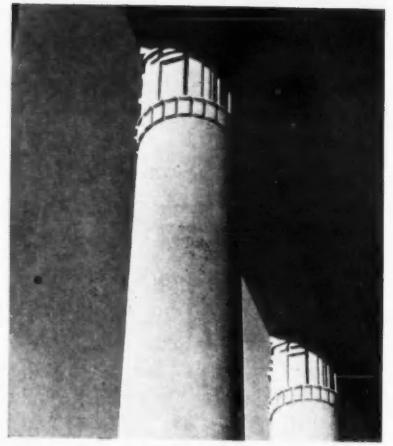


There will be about forty synchronized electric clocks. The casing is of bronze.

DETAILS: IN-





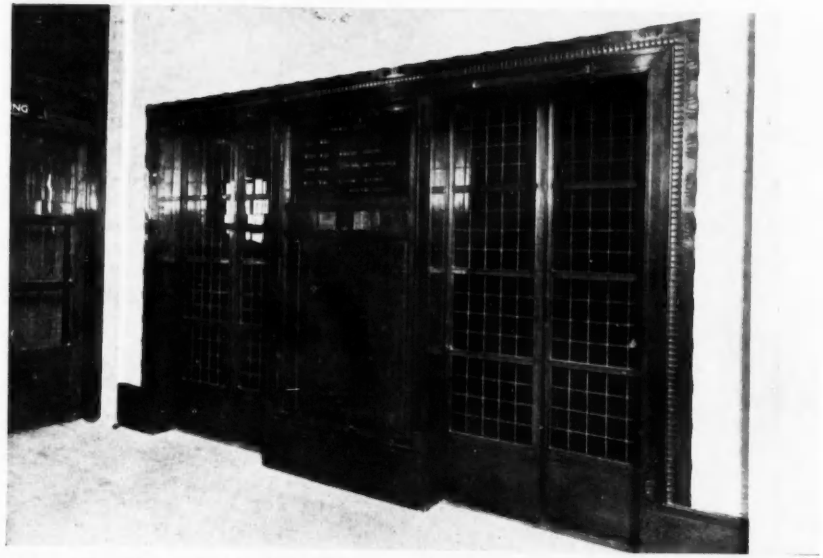


Two of the Portland stone piers on the tower, about 150 ft. above pavement level.

AND OUTSIDE

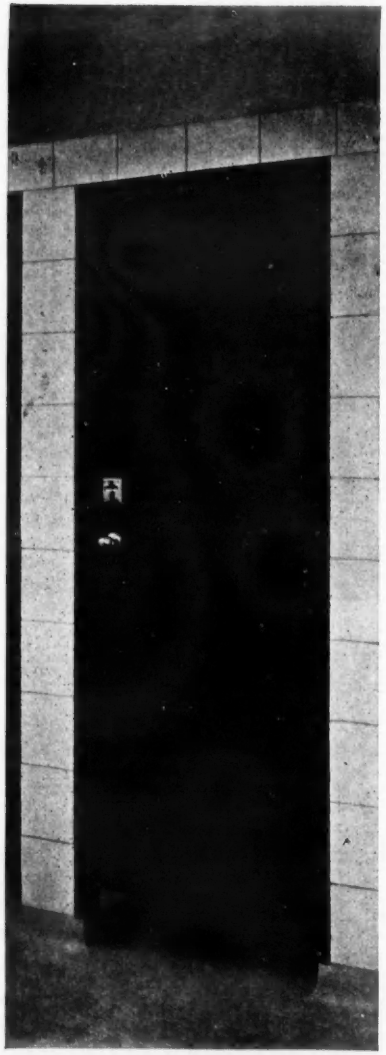
Decorative details of two typical metal windows.





The entrance to St. James's Park Station on the north front and the lift doorways in the main building. The entrance is of the standard design—of which simplicity is the keynote—now being adopted for all the Underground stations. Notable features of the lifts are the mechanically operated doors of bronze and glass, behind which are rolling gates of vertical bronze bars.

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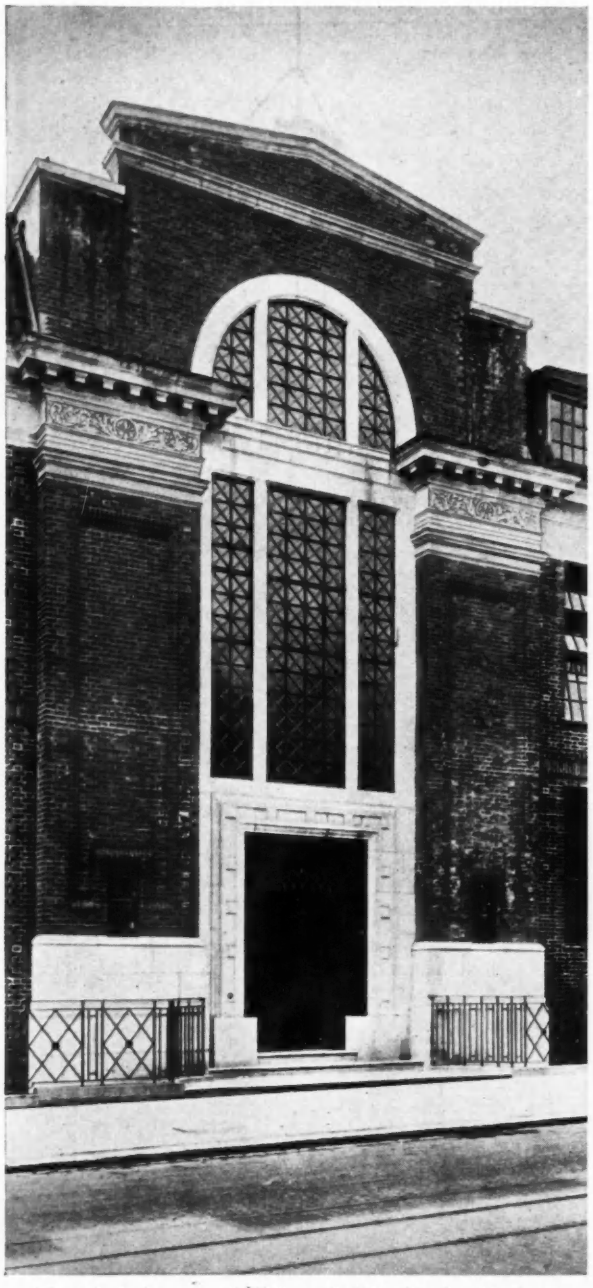


Underground Headquarters, Westminster.] *[By Adams, Holden and Pearson.*

A w.c. door, a row of lavatory basins with mirrors above, and the interior of a w.c. The sanitary equipment is no whit inferior to that of the modern hospital. Notable features are the flush wood doors, rounded corners, and the elimination of uncovered pipes and other details likely to harbour dirt or disease germs. The tiles, wall surfaces, and equipment are white.

NORTH-WESTERN POLY

DESIGNED BY RILEY



The principal entrance in Prince of Wales Road, with the tall semicircular-headed window lighting the staircase.

THE new North-Western Polytechnic, to be opened by the Prince of Wales tomorrow, has been designed with a distinct Georgian flavour. The principal elevation faces Prince of Wales Road, and has a central feature of a slightly projecting panel and piers of brick, ending in a low pediment, in which are placed the main entrance and the tall round-headed window lighting the staircase. At the corner of Kentish Town Road is the entrance to the assembly hall. The Polytechnic is four stories high, and is built of red bricks, with dressings and cornice of "reconstructed" Portland stone. The roof is covered with Italian tiles.



The new North-Western Polytechnic, to be opened by the Prince and Kentish Town Road. It is four stories high, and is built of stone. The mansard roof is



The assembly hall, which accommodates five hundred persons, building. It is fan-shaped in plan, with the platform in the for cinema

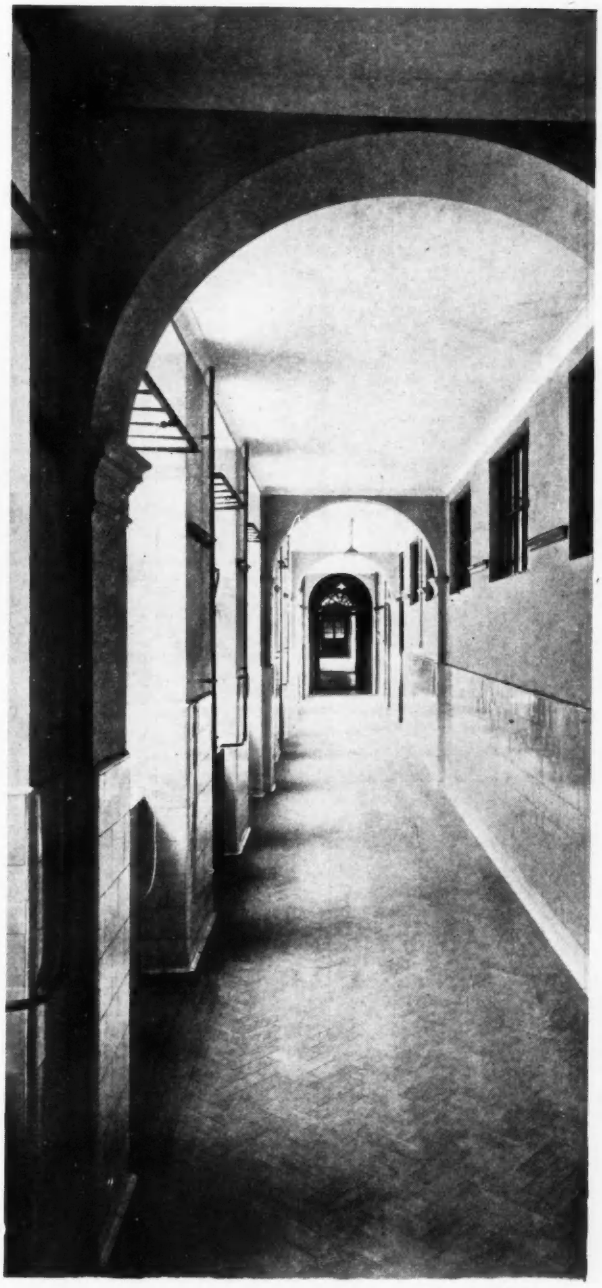
TECHNIC, KENTISH TOWN
AND GLANFIELD



of Wales tomorrow, stands at the corner of Prince of Wales Road red bricks, with dressings and cornice of "reconstructed" Portland covered with Italian tiles.



has been designed as the most important recreative feature of the angle and a gallery on the curved side. Facilities are provided display



A corridor. Primrose-coloured tiles are used for the dadoes, the wall surfaces being a pleasant tone of grey.

As will be seen from the plans on the following pages, there are in the half-basement composing and printing machine rooms, and classrooms and workshops for the teaching of printing and design, cabinet-making, upholstery, French polishing, and woodwork; on the ground floor, the junior technical school of engineering, physics, and chemistry; and, on the first floor, a complete commercial school, with nineteen classrooms of varying sizes. The main entrance to these departments is in Prince of Wales Road.

The second floor provides a complete trade school for girls, which will include training in domestic economy, needlework, laundry (washing and ironing) and house-



The North-Western Polytechnic, London.] [*By Riley and Glanfield.*

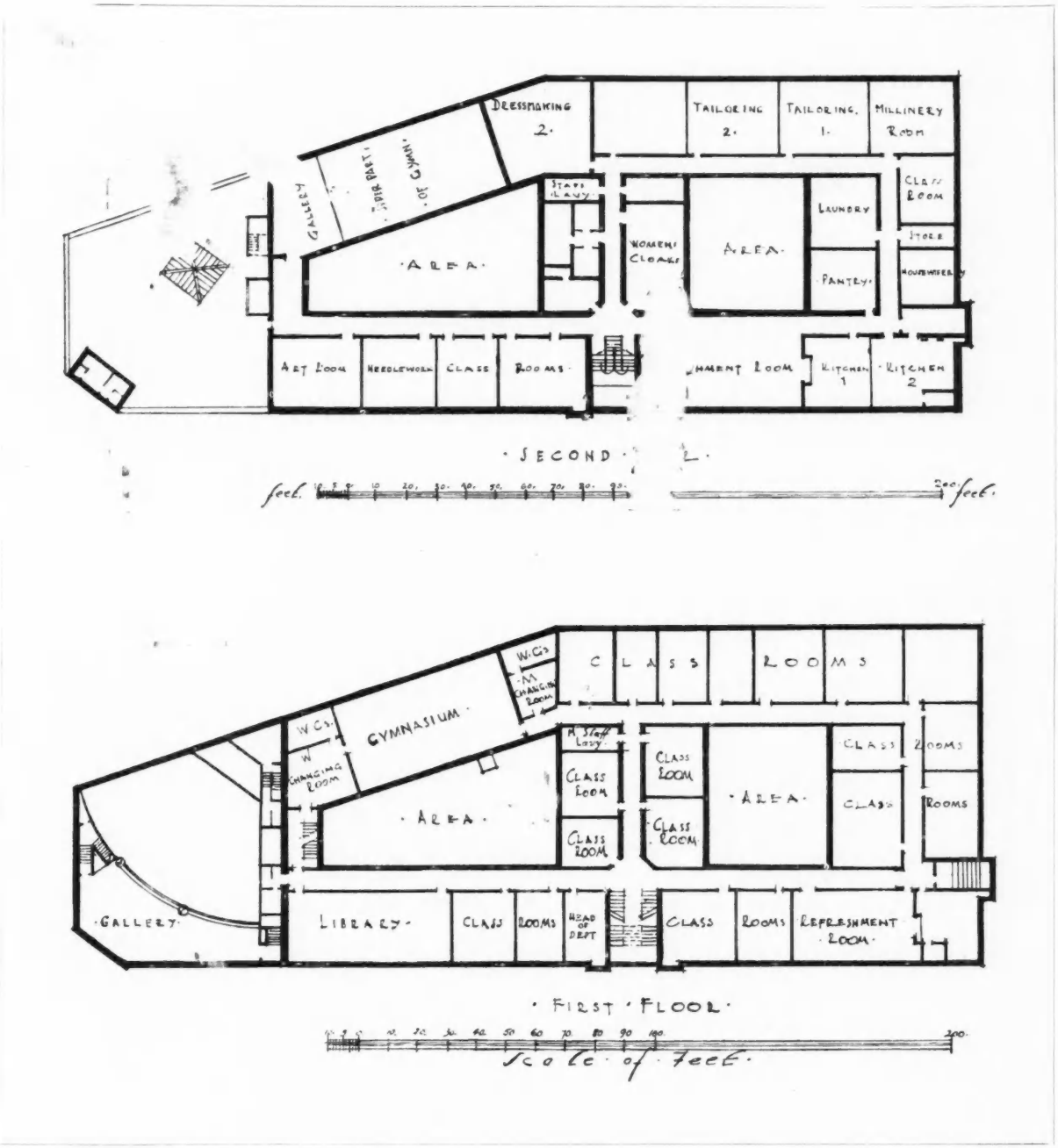
Basement and ground-floor plans. In the basement are composing and printing machine rooms, and classrooms and workshops for the teaching of cabinet-making, French polishing, and woodwork. The ground floor contains the junior technical school of engineering, physics and chemistry, the assembly hall, and the men's and women's common rooms.

wifery. This part of the Polytechnic is entered by a special entrance on the west front of the building.

The administrative offices and book store are placed on the ground floor, and the administration of the girls' trade school and the commercial school near their respective accommodation. There is a flat for the caretaker in a corner of the building on the lower floor.

The ventilation of all the rooms is by easily opened hopper sashes, and the heating of the rooms by radiators behind which the fresh air is admitted through air bricks, thus securing a simple and natural change of air into every room.

Special attention has been given to recreative facilities of the building. They embrace a billiards room with two tables, two club rooms, and large common rooms for both men and women. There are also a commodious library, a large refreshment room, and a spacious gymnasium with lockers, changing-rooms, and baths of various kinds to assist in making the exercises healthy and invigorating,



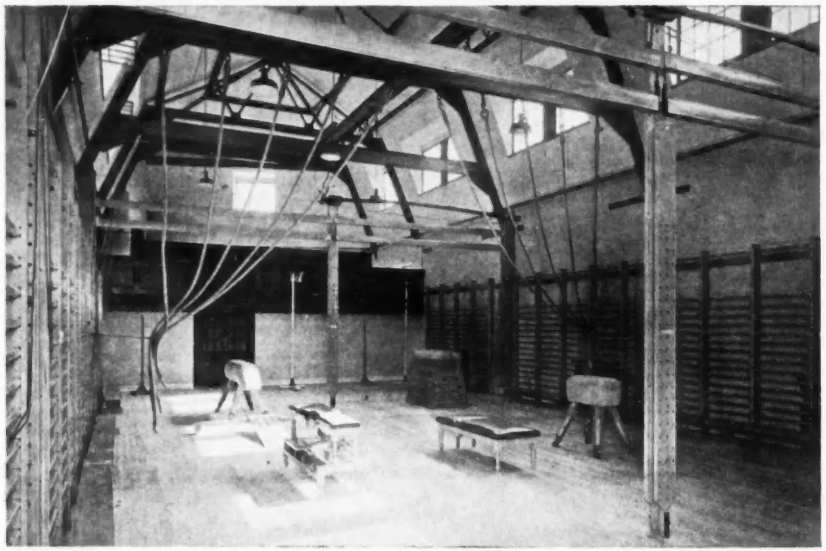
The North-Western Polytechnic, London.] *[By Riley and Glanfield.*

First- and second-floor plans. On the first floor is the commercial school, and on the second a trade school for girls, to provide training in domestic economy, laundry, and housewifery. Other accommodation on these floors includes a gymnasium, a library and refreshment rooms. Lavatories are provided on every floor.

and a dining and assembly room in connection with the girls' trade school.

The most important provision for recreation is the large assembly hall, which accommodates 500 persons. This is provided with a stage and facilities for cinematograph representations. It is licensed by the London County Council for music and dancing, and has a good floor for dancing.

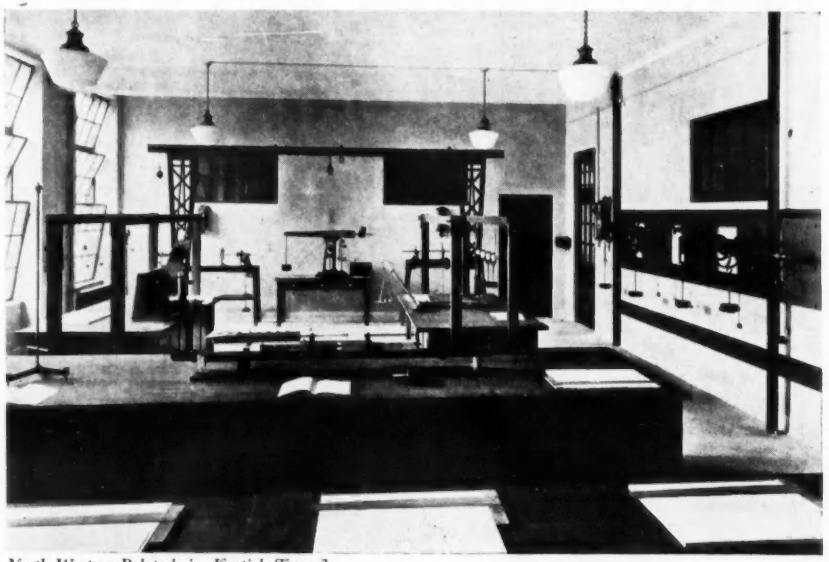
The provision of so much recreative accommodation has necessarily greatly influenced the planning of the building, and has been disposed in such positions as would give pleasant and useful aspect without much appropriation of the silent space so essential for teaching in a Polytechnic embracing the curriculum which has been adopted here. The heating and ventilation meet the most recent requirements for similar buildings, the air is washed and mechanically extracted by fans driven by electrical power.



Attached to the gymnasium, which is well equipped, are lockers, changing-rooms, and baths of various kinds, to assist in making the exercises healthy and invigorating.



Two common rooms are provided, one for men, a corner of which is shown, and one for women. All the rooms in the building are well-lighted and pleasant.



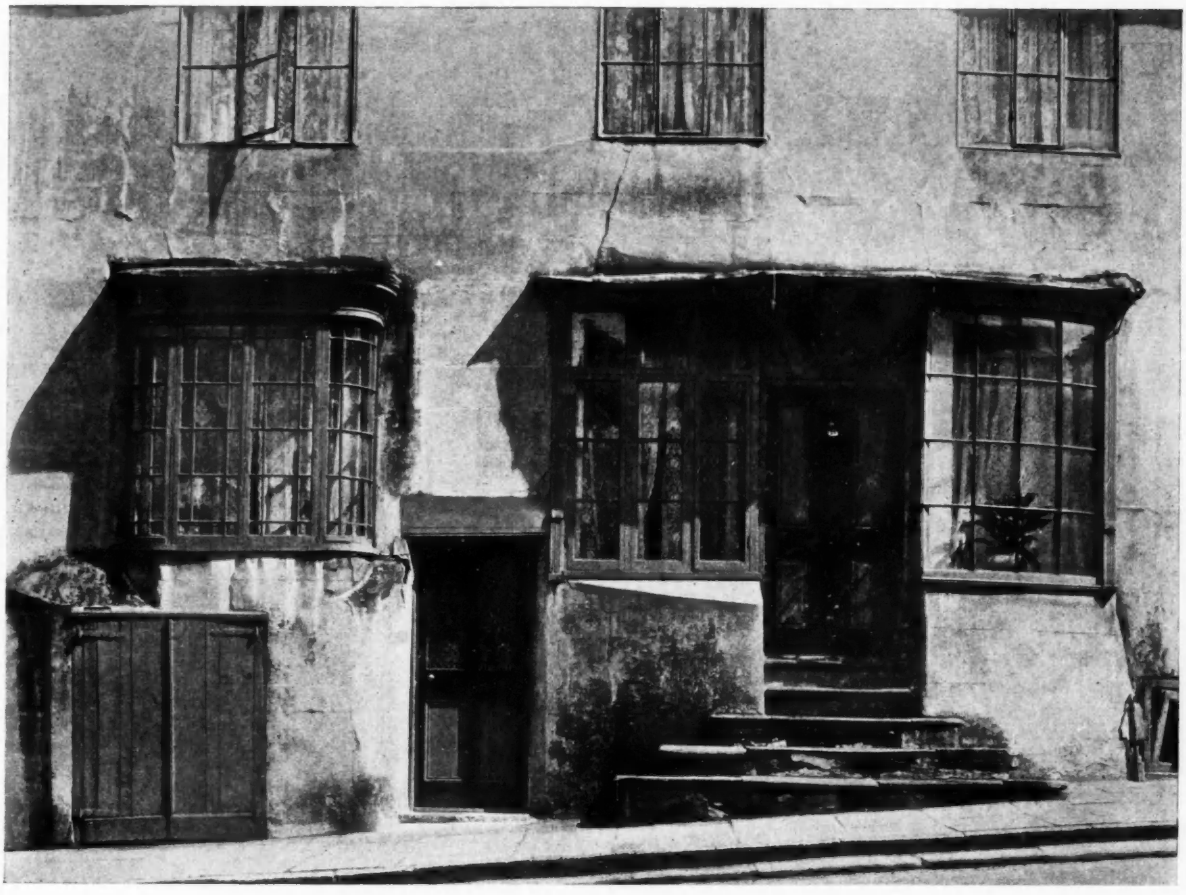
North-Western Polytechnic, Kentish Town.]

Accommodation is provided for a junior technical school of engineering, physics, and chemistry ; it includes the physics laboratory shown.



[By Riley and Glanfield.

The library. Among the other recreative and social features of the building are a billiards room and two club rooms. There are also refreshment- and dining-rooms.



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ENGLISH PRECEDENT No. 86

NO. 28A NORTH ROCK, WARWICK

The fragment from Warwick, shown in the photograph, consists of an array of dissimilar units assembled without any apparent regard to their relation with one another. Yet the harmonious unity of this picturesque patchwork is comparable to that produced in a patchwork quilt. Just as in the quilt one seeks out the distinctive colours and patterns of the units after a first enjoyment of the whole effect, so the eye roams over these doors and windows, noting the slim channelled pilaster framing the double shop front and the proportions of the glazing.

The little pent roof with its crumpled covering above, and the dignified if ragged stretch of steps below, emphasize the completeness of the whole. The more sophisticated window, elliptical on plan, has a modest elegance.

The secret that makes such a group as this so full of charm lies in certain judicious simplicity in detail, a just balance between symmetry and freedom, and an instinctive suggestion of repose in the lines and proportions—a secret that the restless uncertainty of modern art is perhaps striving to rediscover.

—[V. M. CHRISTY]

THE HONEYWOOD FILE

BY KARSHISH

XXIII: Sir Leslie Brash Takes Charge

There is a partial hiatus in the file owing to Spinlove's holiday abroad. Brash, his client, has appointed himself inspector of works "in the interim" of his architect's absence, and has asked to be kept informed of his address "for convenience in telegraphing." If Spinlove has left adequate drawings and instructions behind him, Grigblay, the builder, will endure his absence with an equanimity Spinlove probably has no idea of; and on his return all will be found safe and satisfactory—unless, possibly, it is not. The chief dangers are Brash's interference and the immovable steadfastness of Bloggs, the foreman, who is likely to follow what he deems to be his instructions with a devotion which no obstacles will discourage.

SPINLOVE'S ASSISTANT TO BRASH

Dear Sir, 12/10/25

Regret was not at office when telephoned inquiry received.

Have heard nothing from Mr. Spinlove except one word wirelessed from aeroplane near Barcelona ten days ago. On inquiry ascertain this not code word, but given to understand means Mr. Spinlove in good health and enjoying holiday.

At present Mr. Spinlove believed to be Corsica or Athens unless breaking journey Constantinople; therefore difficult to cable, but in any case scarcely possible make your question clear or for Mr. Spinlove to reply without drawings at hand. In circumstances think best hold off work terrace steps until return. Have directed Mr. Grigblay accordingly.

Yours faithfully,

P. R. PRINGLE
for J. SPINLOVE

Pringle seems to have modelled his style on the penny-a-word diction appropriate to inland telegrams. Spinlove should not allow this.

PRINGLE TO BRASH

Dear Sir, 15/10/25

Your telephone message directing proceed work terrace steps received. Have instructed Mr. Grigblay accordingly.

Yours faithfully,

MISS BRASH TO PRINGLE

Dear Sir, 15/10/25

If you feel at liberty to do so, will you say what the single word was which Mr. Spinlove wirelessed, as there is a great difference of opinion here?

Yours truly,

PHYLLIS BRASH

PRINGLE TO LADY PHYLLIS BRASH [*sic*]

Madam,

In reply beg state word wirelessed by Mr. Spinlove Oct. 2nd *YOICKS*. This not code word, but informed means Mr. Spinlove in good health and enjoying holiday.

Yours respectfully,

Pringle has, it will be seen, made "Pud" a lady in her own right. He evidently supposed the letter was from Lady Brash and was ignorant of the titular distinction. "Pud" will laugh, and her dad's ambitions may be flattered. Pringle is apparently a draughtsman who has taken charge in Spinlove's absence.

TELEGRAM BRASH (PENZANCE) TO SPINLOVE (LONDON)

On further cogitation decided desist from work terrace steps ends Brash.

PRINGLE TO BRASH

Dear Sir, 18/10/25

Am in receipt telegram and ordered work terrace steps be abandoned.

Yours faithfully,

BRASH TO PRINGLE

Dear Sir, 22/10/25

My telegraphic communication from Penzance was, I apprehend, too hurriedly precipitate, as on inspecting the work on my return I find I was a little misled in my preventative precautions and I desire that Mr. Grigblay shall now proceed with the steps.

Yours faithfully,

PRINGLE TO BRASH

Dear Sir, 23/10/25

Your instructions regarding terrace noted and have ~~again~~ cancelled previous order, as directed.

Yours faithfully,

The word excised hints that even the purely vicarious duties of Pringle do not save him from an impulse of rebellion.

PRINGLE TO GRIGBLAY

Dear Mr. Grigblay, 23/10/25

Sorry, but old man Brash written now definitely terrace steps *are* to go on. Am doing best keep things straight but O.M.B. not able make up mind.

Yours truly,

Pringle addresses Grigblay personally apparently to propitiate him, and because he is ashamed of writing these contradictory orders. He has, of course, no business to write letters behind the scenes. He is clearly a second-rate fellow, deficient in loyalty. We may suppose the copy was made and filed without his cognizance.

GRIGBLAY TO SPINLOVE

Dear Sir, 24/10/25

We note that work on terrace steps is now to go on and we have given orders accordingly. May we remind you that in eleven days we have laid our men off this work or put them on again no less than *four times*. We must point out that such confusion of orders is not reasonable and is beyond what we are entitled to expect. If there is any question, the work had better stand till Mr. Spinlove can decide what is to be done. This disorganization of our arrangements is a serious matter for us, and we regret we shall have to make a charge to cover loss of men's time.

Yours faithfully,

As before, Grigblay shows he will not stand nonsense.

PRINGLE TO BRASH

Dear Sir, 25/10/25

Enclosed copy of letter received Mr. Grigblay which perhaps you ought to see.

Yours truly,

BRASH TO PRINGLE

Dear Sir, 26/10/25

I shall be obliged if you will signify to Mr. Grigblay my apologetic regrets that the necessary preventative precautions should have incommoded him. In the circumstances I am greatly pleased to accept the suggestion he makes and I desire him to desist from operations on the terrace steps until Mr. Spinlove's return.

Yours faithfully,

Five times!

GRIGBLAY TO SPINLOVE

Dear Sir, 30/10/25

We understand you are back and enclose list of extras ordered by Sir Leslie Brash during your absence. They are of a minor character, and as Bloggs received the orders when the men were actually at work, he had to do what he was told or stop the work. We have kept time-sheets as the work cannot be measured.

We understand from Bloggs that the bedrooms are to be papered. As you know, they are being finished with a felt-faced float for distempering. We shall be glad of particulars of papers at once. Bloggs was given orders to dark stain oak, but we await your directions.

Yours faithfully,

Builders are always ready to render day work accounts—that is, accounts based on the cost of the men's time and of material—instead of accounts based on measurements priced at the contract rates, and it is only fair they should do so when the work involves pulling down or small separate jobs; but the method is unsatisfactory for the owner because, as the builder will be reimbursed for all his outgoings and he

receives in addition (usually) 15 per cent. on the net cost for establishment charges and profit, there is no inducement to economy; and because, as the workmen and the foreman are aware of the circumstances, there is a tendency for everyone to ease off on day work. In addition to this the logging of the men's time is in the foreman's charge and, as he is accountable to the builder for keeping down the cost of labour covered by the tender, the day work time-sheets are apt to record hours which properly should be charged to contract work. Day work accounts, unlike measured accounts, always *pay the builder; and from what has been said it will be realized that a dishonest builder can make them pay a great deal too well.*

GRIGBLAY TO SPINLOVE (CONFIDENTIAL)

Sir, 30/10/25

I think I ought to let you know at once that a fortnight ago Sir Leslie Brash sent me drawings and specification for block of four cottages he wants erected down at bottom by the lower road, and asked me for a price. The name on the drawings is Mr. Cohen Snitch, but a young man in our prime costing says they are copied from published plans by Mr. Sutcliffe Regentstook, A.R.I.B.A., and we have turned them up in our file of the *Builders' Record* of May 7th, 1923. The specification is a ready-made affair, with just a tender form without any Conditions, and the bricks, chimneys, windows and all sorts are to be "same as at Honeywood."

Now, apart from the work being only half described and position on site, drains, roads and water supply, etc., left out, we don't do speculative work and don't care to tender without proper particulars and quantities. At the same time we should be quite willing to do the work under our present contract schedule and leave it to Mr. Tinge to measure and settle the account; but we do not think this would suit the old gentleman, as what he is after is a cut price and cut fees, without doubt. Not in any case should we agree to a proposal of the kind without consulting with you; and this was the reply we made, and were then asked to return plans, etc.

Since then Bloggs tells me Nibnose and Rasper's manager was down at bottom, looking for mushrooms Bloggs thought; but young Rasper turned up after and had the face to ask questions about water. Bloggs told him we were managing without any, and saw him off; so it's pretty clear what is going on, but I'm not going to have Nibnose and Rasper learning how to build from me, and if Sir Leslie Brash brings them on to the ground he will have to pay me for a night watchman and a new lock-up or I shan't be able to keep a plank or a ladder or a drain pipe or a bag of plaster or anything else on the job without a man sitting on it. That young Rasper would strip the tiles off the roof if you so much as turned your head to cough. I don't forget the trick he played me with that old six-hundred-gallon cast-iron tank I loaned them; and then they told me they hadn't had it. I happened to go along by, and there was my brave tank set up ten feet in the air on a staging and daubed over so it won't be recognized. Ho, says Master Johnny Rasper, all of a surprise, *is that yours?* Forgot where they had stole it.

Sir Leslie Brash sent me a plan and a picture of a gimcrack garage affair with pink asbestos slates and blue doors and a bit of bargeboard painted yellow and a flag at the gable. He had torn it out of Hutt and Gambols reach-me-down bungalow catalogue, but had cut off the firm's name and the price for fear I should know too much; and he wanted me to give a price for two of them joined together for his cars to go in at the north-west end by trades entrance. It would be a pity to go and put a thing like that up against the house, as I think you will agree. Besides, we can't build the stuff H. and G. spit about all over the country nor at their price if we did, and I think Sir Leslie Brash should be told so.

With apologies for troubling you, but thought you ought to know it.

Yours faithfully,

A very pleasant, chatty letter: the letter of a friend! It has apparently occupied Grigblay's evening hours. Brash's intention, no doubt, is to save his pocket by cutting out architect's fees—for no doubt he made a bargain with Mr. Snitch—and he may also feel that Grigblay's work is unduly expensive and that the high cost is due to Spinlove's complicated methods and exacting demands. He may also wish to "be his own architect," and has no doubt that by uttering the words "two three- and two five-room cottages" and by getting someone to "draw out the plan" and by agreeing a price with a builder, he is being it. Whatever the results, he will be slow to see defects in "my own work"; and if the plans do not give him what he wants he will enjoy "making improvements," and take great credit to himself for the ingenious botching and makeshifts by which the shortcomings are made good. He will helplessly protest against the builder's account for extras, whether it is fair or not, and will always believe that he was "swindled."

As for Mr. Cohen Snitch, his kind is common. He has a knowledge of building sufficient to enable him to hold himself out as an architect in those wide fields that ignorance puts at his disposal; and his many diverse activities bring him commissions which his reputation as an architect would deny him. The obligations of a profession of which he is not a member do not weigh with him, and he enjoys the same advantage over the accredited architect as the man who ignores the rules of a game has over one who observes them.

It is difficult to believe that Brash is not aware that he is treating his architect in a shabby way; but we have already seen that Brash can outface such consciousness. He probably regards the whole affair as a matter of fees. He is paying *Spinlove for the house, but sees no reason why he should* pay *him when he can manage without his services; his instincts, in fact—or let us say his antecedents—do not allow him to distinguish between obligations due to a professional man and the consideration expected by a commercial agent. If Brash is conscious that Spinlove is giving to Honeywood a devotion for which he can never be paid except in thanks, he probably merely regards his architect's services as remarkably good value for the money, and is too coarse in grain to be aware of any reciprocal obligations, much less take pleasure in acknowledging them.*

What is the unlucky Spinlove going to do about it all? He first flies for rescue to his friend Wychete, it seems.

SPINLOVE TO WYCHETE

Dear Mr. Wychete, 1/11/25

I am sorry to bother you again, but a most awkward thing has happened. I enclose copy of the builder's letter which gives the facts. I found it on my return from a four weeks' holiday abroad. Mr. Snitch is a house and land agent. I met him once, as he was appointed by the adjoining owner to agree a watercourse. The cottages will probably be three hundred yards or more from the house, but associated with it as is evidently the owner's intention — note similar brickwork, chimneys (!), etc. I should be most grateful for any hints what to do.

With kind regards,

Yours sincerely,

PS.—Could you possibly send me a line at once? I shall have to meet the owner in a few days, at latest.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 1/11/25

I returned to the office yesterday. Mr. Grigblay has sent me a list of variations and extras ordered during my absence and there is a question you have raised about the terrace steps. I can come on to the site on Friday or Saturday, if you will let me know when I can meet you, so that these and any other matters may be settled on the spot.

I had a delightful time abroad.

With kind regards,

Yours sincerely,

Spinlove has apparently put off meeting Brash until he may hope to have had Wychete's reply.

WYCHETE TO SPINLOVE

My dear Spinlove, 2/11/25

Your luck seems out. The position is certainly awkward, as you say, but the probability is that your client does not realize the unfairness to you—though one would imagine he intends a snub. Much depends upon your personal relations, and the kind of man he is. You alone can judge how far expostulation or protest can be made to weigh with him. Mr. Snitch's action seems most unprofessional; but he does not belong to our camp, and in any case we do not know what happened: there is nothing to prevent your client employing him if he wishes, and it is no good taking any steps to get Mr. S. to withdraw. Even if you were able to do so it would not persuade your client to entrust the work to *you*.

Adopting Regentstook's design is, of course, a breach of copyright, and would give him grounds for an action for damages. Copying your details also comes very near to the same thing. Your client's intention is clear, and the wrong is of the same kind though so different in degree that you would scarcely be in a position to claim damages.

I should be interested to know the end of the story. You must not lose time or your client may accept the other builder's tender.

Ever yours,

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 3/11/25

I confirm telephone message fixing Friday at 10 for our meeting on site.

Mr. Grigblay has mentioned to me that you asked him to tender for a block of cottages which, for certain reasons, he felt unable to do without first conferring with me. I am naturally so much interested in Honeywood that I should be indeed grieved not to be allowed to design the accessory buildings, particularly as you mentioned these cottages to me as matters in which you would want my advice.

However, we can speak of this on Friday; but I write to warn you, before you commit yourself in any way, that the plans you sent Mr. Grigblay are not an original design, but have been copied from plans by another architect which were published a short time ago in one of the building papers. The designer holds the copyright in his plans, and you will be liable to action for damages if you proceed. In the same way my detail drawings for Honeywood are my copyright and cannot be used for the proposed cottages without my consent.

Yours sincerely,

Spinlove is quite right in his statement of the fact of copyright ownership, but he manages to suggest a masterfulness in architects which exceeds the life.

SPINLOVE TO WYCHETE

Dear Mr. Wychete, 6/11/25

I am most grateful to you for your letter. Directly I got it I wrote to my client and warned him of the infringement of copyright, but when I saw him two days later he told me he had "provisionally accepted"—as he called it—tender for the cottages from a local firm, Nibnose and Rasper. He had, however, accepted the tender in fact: by "provisionally" he meant that he was at liberty to accept, or not, a supplementary estimate for outbuildings.

Well, there was a great to-do. He was most indignant with Snitch for fobbing him off with someone else's design and charging thirty guineas for it as an "inclusive fee"; and he means to make him disgorge, for he has already paid the fellow.

He was quite nice to me—particularly so, for he is a self-important man and rather obstinate in favouring his own ideas [*ahem!*], and I really do not think it occurred to him that he was injuring me. He thought he would save fees and get a cheaper building, and that it was entirely his own affair.

The tender he has accepted is for £1,350 for the block of four cottages—an impossible price. A great deal of the work is left out of the specification, to say nothing of drains, paths, and water supply, and though the specification calls for the building to be "completed in all details, etc.," Nibnose and Rasper attached to their tender a letter which, rather slyly, excludes work not described. There are no Conditions of Contract.

I had to point all this out to Brash and insist that the cottages must cost at least £1,700 before he has finished with them, and perhaps nearly £2,000; that there was nothing in the contract to prevent the builder putting in the cheapest and most shoddy work, and that he would have a huge bill for extras and be at the builders' mercy. In fact Brash began at last to understand what an architect is for.

The next difficulty was how to get Nibnose and Rasper to withdraw with a merely nominal compensation, or none at all. Owing to a previous muddle they have a quite unfounded grievance against me; however, Brash wrote and told them he had discharged Snitch and appointed me his architect, and I got Nibnose to my office and, after cross-examining him on what he had included for and what not, he was obliged to agree that, as a basis for a contract, his tender was a farce. He was quite reasonable, said he had done his best with the particulars supplied, that there were big risks—and so on. Finally it was agreed that he and Grigblay should tender to a new design, and that the lowest tender should be accepted. So that's that; and I am enormously obliged for your hints, without which I do not know what would have happened; and Brash, if he only knew it, is still more deeply indebted to you.

I am putting up temporary shed of larch slabs as garage, which, pushed back among the trees, will look quite inoffensive.

With many thanks and best wishes,

Yours very sincerely,

Spinlove seems in fine fettle. His recent holiday is perhaps accountable. He has evidently swept Brash completely off the ground upon which he had taken so formidable a position, and won his entire surrender.

(NEXT WEEK: XXIV—LADY BRASH CAUSES A DIVERSION)

THE HOUSE OF WILLIAM BRUCE: VI

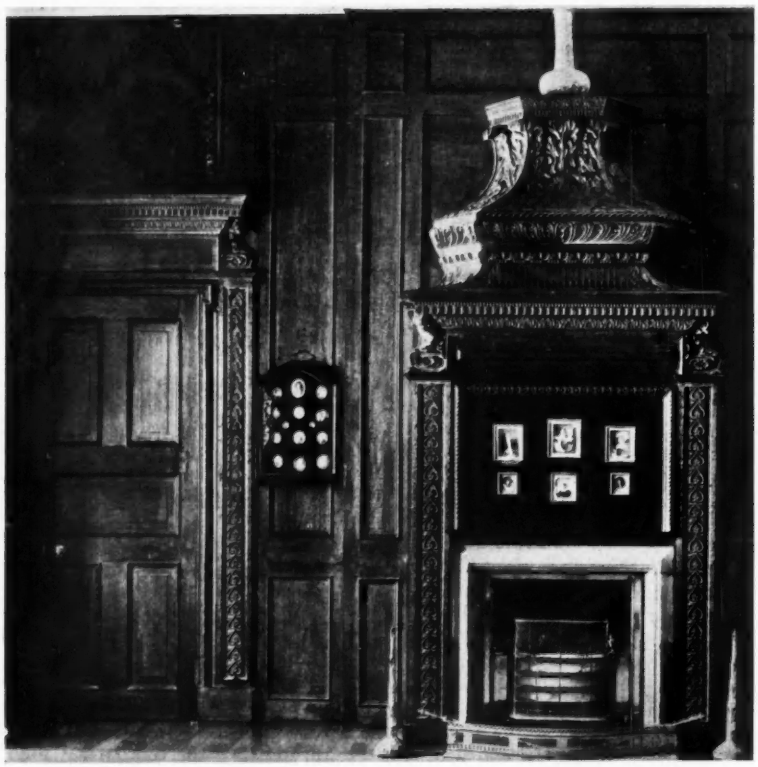
An Architect's Home

And Its Influence on English Architecture

THE photographs and measured drawings reproduced on the following pages are taken from the small oak drawing-room, which is situated at the rear of the entrance hall, and is entered from the drawing-room on the one side and a private sitting-room on the other. This room is of singular interest in that it contains a greater proportion of fine carving than the other rooms in the house. Moreover, it has the one canopied fireplace in the house which is not placed in a corner of the room.

It is to be regretted that this interesting development of the canopied angle fireplace motif placed in the centre of a wall has not been pursued by English architects. Bruce's fireplace compares very favourably with the plain canopied Italian fireplaces in which the canopy is formed by the flue sloping up towards the ceiling.

The open doors in the drawing-room give a view of the small oak drawing-room, whose fireplace is on the axis of the door. This doorway is given additional importance by the ceiling cove being broken over the substantial cornice which surmounts it while the room

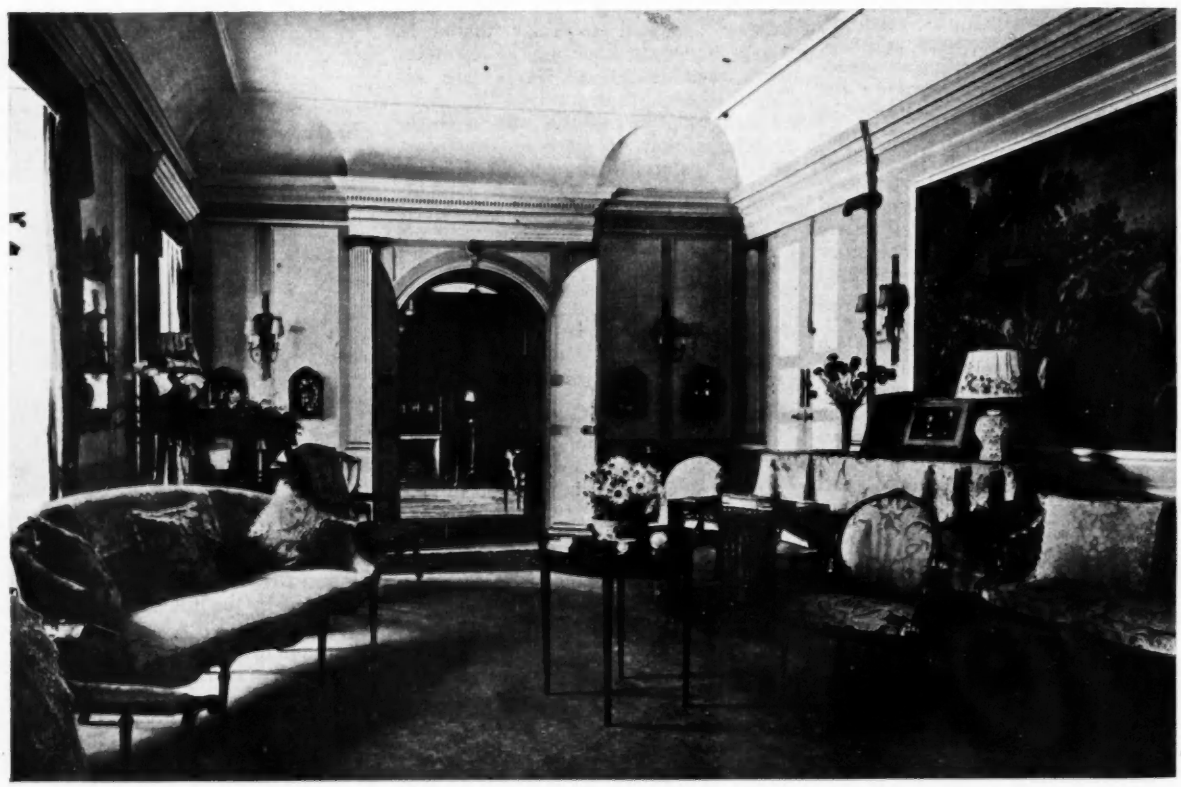


A notable feature of the oak drawing-room at Kinross House is the fireplace, shown above. A measured drawing to accompany the illustration is reproduced on the facing page.

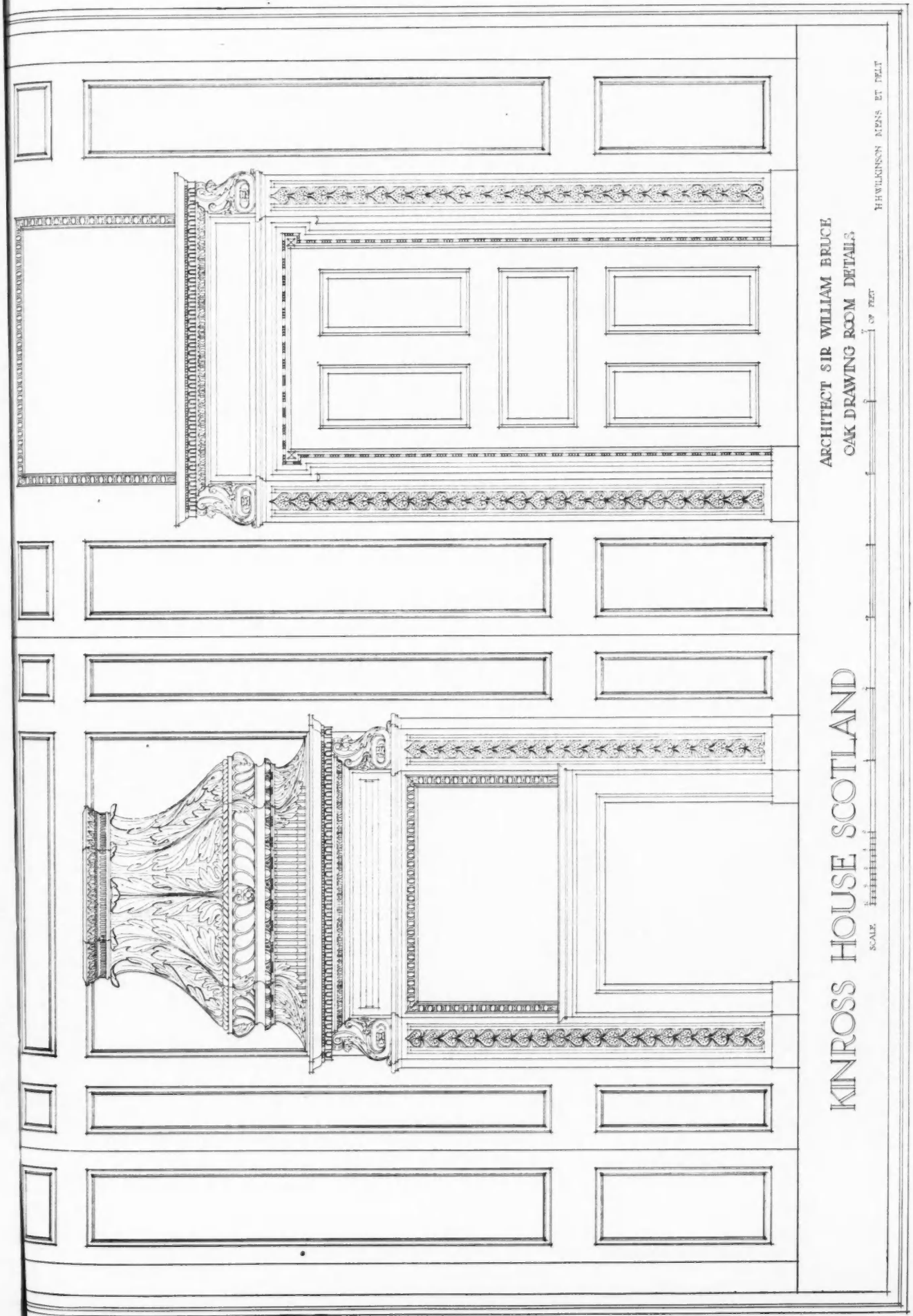
is given additional unity by the fact that the fireplace and door jambs are of the same design, though the unequal height of the jambs constitutes a serious error of inflection.

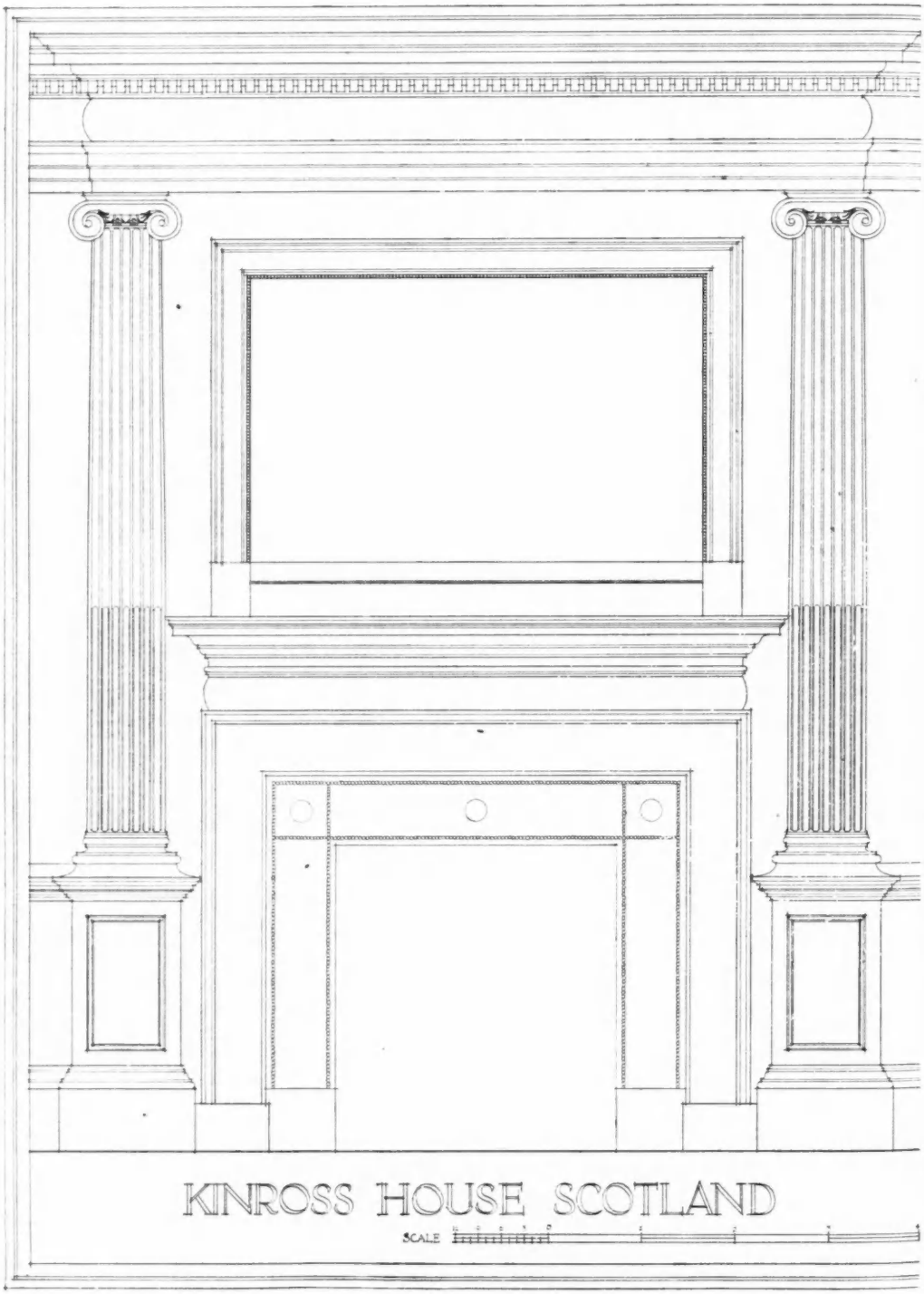
The interior of the house, like the exterior, bears close comparison with the work of the brothers Adam. The Adams obviously deserve the greatest praise in making the English house and its furnishing and decoration a notable feature of the eighteenth century. The beauty they imparted into their work was, surely, due to the influence of Bruce's work, particularly the interior of Kinross House. What could be more natural, as I stated in a previous instalment of this article, in trying to explain the architecture with which the Adam brothers captured London, than to examine the architecture amongst which they were born and reared to maturity? It is thus clear that Kinross had a great influence on their work.

Kinross House was occupied until 1819. For a period of seventy-two years—until 1891—it remained unoccupied. During those years alterations were made to its roof. In 1903 the late Sir Basil Montgomery, who was then owner of the property, had the interior restored. The chief rooms are on the garden side of the house. From these rooms magnificent views are obtained of the surrounding district.



The drawing-room, Kinross House. Through the open doors can be seen the fireplace in the oak drawing-room. This doorway is given additional importance by the ceiling cove being broken over the substantial cornice which surmounts it.
(See pages 578–579.)


KINROSS HOUSE SCOTLAND
ARCHITECT SIR WILLIAM BRUCE
OAK DRAWING ROOM DETAILS
SCALE
H.H.WILKINSON MEAS. ET DELT


KINROSS HOUSE SCOTLAND
SCALE


ARCHITECT SIR WILLIAM BRUCE
DRAWING ROOM DETAILS
OF FEET
H. H. WILKINSON MENS ET DELT

THE COST OF HEATING BUILDINGS: i

BY ALEX H. HAYES

THE installation of a heating system involves consideration of three main factors: 1: the initial cost of the apparatus; 2: the labour cost in operating and supervising; and 3: the fuel or equivalent cost per unit of effective heat. The first of these usually figures prominently, as it represents an immediate outlay and can be readily visualized at its full importance; though in fact it may have a lesser significance than the other factors. The second is not easy to assess at its true cost, for while the attendance on a boiler for a large central-heating system can be estimated readily, in other cases questions of personal convenience and simplicity of operation are involved. Fuel cost, however, is of very definite importance, and as fuel consumption is directly related to the work to be done by the installation, fuel can well be considered as at least one basis upon which to compare various systems.

It is proposed, in the following notes, to discuss the economy and utility of various methods of heating; not with a view to pronouncing on any one as being the best for all conditions, but rather with the object of setting out facts which will assist in the choice of a system to meet any set of conditions.

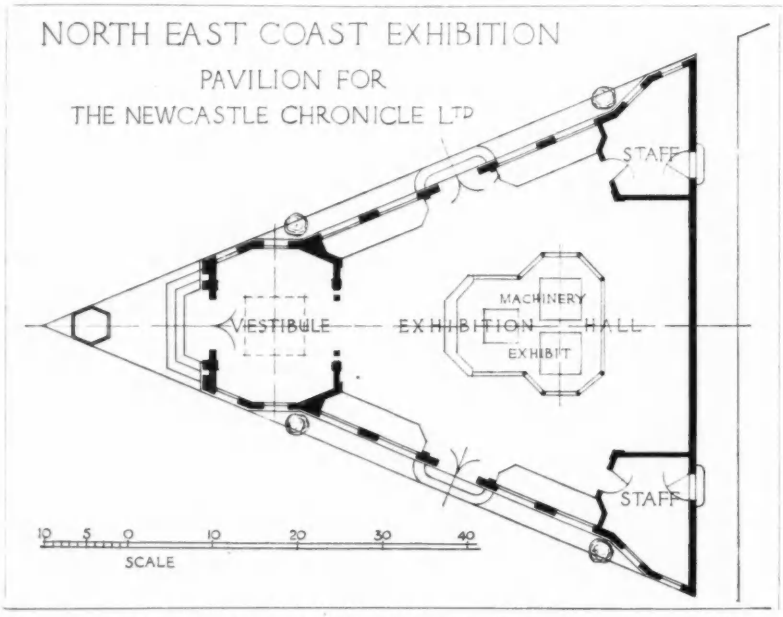
FUEL COSTS

The various fuels available for the heating of buildings are coal of various grades, coke, anthracite, briquetted coal and coke, fuel oil, gas, and electricity. Of these electricity alone has an unvarying value and can be expressed in constant terms of heat value. Under the modern system of selling town's gas on the basis of its thermal value (price per therm), that fuel can generally be considered as having a stable basis for costing; though even with gas, as used in some combustion systems, variations in composition involve differences in actual heating value, due to the loss of the latent heat in the steam formed by combustion of the constituents. The same applies to coal, in which the hydrogen constituent varies considerably, while also the actual calorific values of coals vary greatly and prices are not essentially based on those values. The calorific values of cokes likewise vary, and not necessarily in strict accordance with the prices.

Coming now to the question of the heat units available in these different fuels, for purposes of comparison it is necessary to express them on a common basis, and for this purpose a convenient one is that which has been adopted for town's gas, viz. the therm, which represents 100,000 British thermal units. Coal, coke, and oil usually have their heat value expressed in B.Th.U. per lb., so it is a simple matter to express the value of these in terms of price per therm. Electricity can be similarly expressed, for the Board of Trade unit (kilowatt-hour) under which electricity is sold is equivalent to 3,411·6 B.Th.U., so that 29·3 electrical units may be taken as equivalent to one therm. For convenience some typical fuel costs in price per therm are given below, together with the therm cost of electricity at different rates:—



Pavilion, North East Coast Exhibition. Designed by Mauchlen and Weightman.



Plan of Pavilion for Newcastle Chronicle, Ltd., North East Coast Exhibition, illustrated above. Designed by Mauchlen and Weightman. The construction is steel framework, covered with metal lathing and cement rendering, finished smooth. The dome is gilded, and the main colour scheme of the building white.

COST OF AVAILABLE HEAT UNITS IN VARIOUS FUELS

			Cost per therm of Potential Heat.
	s.	d.	Pence.
Coal of 14,000 B.Th.U. calorific value at per ton	60	0	2·3
	50	0	1·9
	40	0	1·5
Coke of 12,500B.Th.U. calorific value at per ton	50	0	2·1
	40	0	1·7
	30	0	1·3
Anthracite of 15,000 B.Th.U. calorific value at per ton ..	100	0	3·6
	90	0	3·2
	80	0	2·9
Gas at per therm ..	1	6	18·0
	1	0	12·0
	0	6	6·0
Fuel oil of 19,000 B.Th.U. calorific value at per ton ..	100	0	2·82
	90	0	2·54
	80	0	2·25
	70	0	1·97
	60	0	1·69
Electricity at per unit	0	3	88
	0	2	58
	0	1	29
	0	0½	14·5
	0	0¼	7·25

EFFICIENCY AND COST

The foregoing figures, it will be understood, represent only the purchasing cost of potential heat units in different forms, and do not represent the *actual* value of the fuels for heating purposes. The combustion of solid fuels under ordinary conditions is far from complete, and, of the total of heat actually released, only a portion is usually employed effectively, the rest being lost in the flue gases. The room heating efficiency of solid fuel in open fires is very rarely as high as 25 per cent., while usually it is much lower. Closed stoves properly situated may give efficiencies from 45 to 55 per cent., or even higher, with properly regulated draught. The burning of solid fuel in central-heating boilers supplying radiators may allow 40 to 50 per cent. of the heat to be utilized, even in relatively small installations, while up to 65 per cent. is possible with large, well-operated plants. Electric heaters (other than storage heaters), on the other hand, show practically 100 per cent. efficiency, while flueless gas heaters approach the same figure when combustion is properly regulated.

In the light of these facts it is possible to tabulate the fuels mentioned, in terms of cost per *effective* heat unit under different conditions. The figures in the following table may be taken as closely approximate and give a fair view of the relative values of the various fuels used under different conditions. It is seen that an average good-class coal at 50s. per ton, burned under the usual conditions in the open grate, will be dearer than heating by flueless gas radiators with gas at 9d. per therm. Gas at 1s. a therm, however, is not competitive until coal costs 60s. a ton. Coke, either in the closed stove or in the central-heating systems, is distinctly the cheapest fuel available, so far as actual cost of fuel is concerned.

A comparison of the cost of electricity is interesting, in view of the endeavour now being made to popularize electric heating in order to improve power-station loads. Many companies now offer electricity at off-peak periods at as low as ¼d. per unit, at which price it has many advantages and may even be distinctly economical. Where it can be used direct (without the introduction of a heat-storage system) and 100 per cent. effective heating be secured, ¼d. per unit is competitive with gas at 6d. a therm (a low figure at present) used in the high-efficiency water circulator. Even at ¼d. a unit, however, electricity stands at about double the cost of coke used in the central-heating plant. When electricity is used by means of a storage system, even under the highest efficiency claimed for such systems, it is dearer still, though it is worth noting that it is competitive with coal at 50s. a ton burned on the open grate.

(To be continued)

COST OF FUEL PER EFFECTIVE THERM UNDER VARIOUS CONDITIONS OF USE

	Open grate. 20% eff.	Open grate. 25% eff.	Closed stove. 50% eff.	Central heating. Air or water. 40% eff.	Central heating. Air or water. 50% eff.	Flueless gas radiation. Submerged combustion
Coal (14,000 B.Th.U) at— 60s.	11·5	9·2	4·6	5·75	4·6	
50s.	9·5	7·6	3·8	4·75	3·8	
40s.	7·5	6·0	3·0	3·75	3·0	
Coke (12,000 B.Th.U.) at— 50s.	10·5	8·4	4·2	5·25	4·2	
40s.	8·5	6·8	3·4	4·25	3·4	
30s.	6·5	5·2	2·6	3·25	2·6	
Anthracite (15,000 B.Th.U.) at— 100s.	18·0	14·4	7·2	9·0	7·2	
90s.	16·0	12·8	6·4	8·0	6·4	
80s.	14·5	11·6	5·8	7·25	5·8	
Gas per therm at— 1s. 6d.		36·0	Flued gas fires 50% eff.	25·0	Gas circulators and geysers 80% eff.	18·0
1s. 0d.		24·0		15·0		12·0
6d.		12·0		7·5		6·0
Fuel Oil (19,000 B.Th.U.) at—				Central heating 55% eff.	Central heating 60% eff.	
100s.				5·1	4·7	
90s.				4·6	4·23	
80s.				4·1	3·75	
70s.				3·58	3·28	
60s.				3·0	2·81	
			Hot plates for boiling, &c., 30 to 60% eff.			Direct Radiation.
Electricity per unit— 3d.			293-146	103	Heat storage system 85% eff.	88
2d.			193-97	68		58
1d.			97-48	34		29
½d.			48-24	17		14·5
¼d.			24-12	8·5		7·25



The King's Stone, Rollright Stones.
[*From* The Sacred Stone.]

LITERATURE

SACRED STONES OF MAGIC

Mysterious tales of man's former belief in living stones are told by Dr. T. F. G. Dexter, in his entertaining book, *The Sacred Stone*. He tells us, among other stories, of a stone believed in erst-while to turn round three times whenever a certain cock crew; of one that moved around a village as a warning of impending danger; and of others, like the King's Stone, Rollright Stones, illustrated on this page, which became maidens and visited and bathed in an adjacent stream.

Then there were the speaking stones; and those fed with oatmeal cakes, and butter, and steeped in ale!; and those with healing properties.

But, the author reminds us, the most famous speaking stone of Celtic lands was the Lia Fail, which roared when Conn, the Hundred fighter, trod on it, thus proclaiming him King of all Ireland. This stone is supposed by some (but not perhaps the best authorities) to have been taken to Scone, a former capital of Scotland, whence it was removed by Edward I to London, and is now believed to be under the Coronation Chair at Westminster Abbey. Conn was a Goidel, and whoever sat upon the stone was proclaimed as a rightful king of the Goidels, provided the stone screamed when he sat upon it. The Stuarts are believed to be descended from the Goidels, and the fact that James, a Stuart (the sixth of Scotland and the first of England), was crowned King in the Coronation Chair at Westminster Abbey is supposed in some mysterious way to be due to the influence of this wondrous stone.

The belief in the growth of stones is by no means yet dead in England, as the following anecdote, quoted by Mr. W. Johnson in his *Folk Memory*,

shows. A clergyman, trying to convince a bucolic parishioner that stones did not grow, said: "If you put a stone on that mantelpiece and look at it in five years' time, you will find it has not grown." Slowly came the response: "Noa, and I hreckon if you put a 'tater there it wouldn't grow neither!"

The book contains twenty-seven illustrations: some are reproductions of rare eighteenth-century drawings of stone-idols then in existence in England.

The Sacred Stone. By T. F. G. Dexter. PH.D., B.A., B.SC., New Knowledge Press, Treberran, Perranporth, Cornwall. Price 2s., post free.

THE LONDON CITY CHURCHES

The first edition of the booklet *The London City Churches* (originally published by the London Society in 1923 in connection with the proposal to remove nineteen of them) is now sold out, and as there continues to be a steady demand for the book the society has published a second edition, which is on sale at most of the churches.

As Dr. Philip Norman's preface in the new issue shows, the book has been enlarged to include a number of churches not dealt with in the first edition, which was definitely limited to those affected by the controversy of 1923.

The new features are a short bibliography by Miss Jeffries Davis (reader in history to the University of London) and a plan showing the positions of the churches. The latter will prove helpful to those who wish to visit the buildings.

The London City Churches. Second Edition. The London Society. Price 2s. (postage 2d.) in stiff covers, and 1s. (postage 1d.) in paper covers.

DAS BURGENLAND

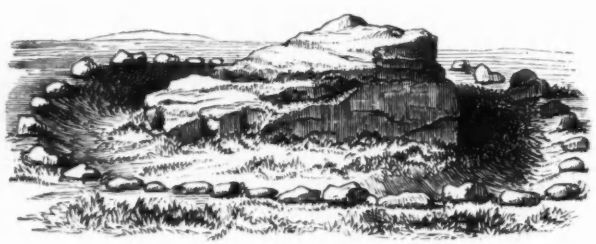
The Burgenland is a delectable land of hills and forests, of castles and churches and quaint little towns. It lies north of Sopron and south of Vienna, and is bordered on the east by Hungary; in fact, it extends into Hungary. It is the territory of the Esterhazy family, and many of their seats are within its confines. It is so beautiful a land that other families besides the Esterhazys have built therein from time immemorial, so that medieval renaissance and baroque are assembled within a comparatively small territory, to the great advantage of the architectural student and the traveller in the less-known parts of Middle Europe. The chronology extends from the middle of the twelfth century: the burg at Güssing, on its hill, provides buildings of that early date, supplemented by the additions made by the Batthyanys in the sixteenth century, with a Franciscan church of the seventeenth, together with a late fifteenth-century altar and a later family vault.



Decorations in the Chapel, Church of Frauenkirchen. [*From* Das Burgenland.]

At Landsee there is a fine castle of the thirteenth century, an excellently preserved ruin, the preservation being due to the care of Count Nicholas Esterhazy in the last years of the sixteenth century. To the fourteenth century belong the first premises of the magnificent Schloss Forchtenstein on the Hungarian border, in the domain from which the Esterhazys derive. The earliest portions of this castle belong to the years about 1350, and some 350 years later the busy builder, Nicholas Esterhazy, exercised his activities thereon and was followed by Count Paul. To the fourteenth century, also, the foundation of the church of Frauenkirchen belongs, but it was entirely altered during the sixteenth and seventeenth centuries and on to the middle of the eighteenth, and is now the most interesting piece of ecclesiastical baroque in the Burgenland, with painted ceilings, statues, and much carved decoration. Mattersburg parish church, with middle-fourteenth-century foundations, has also a number of art treasures. Schlaining has claims to antiquity in its castle of the fifteenth century, very well cared for; but its two churches are not of any great account. There are later buildings of importance, from the quaint Fischerkirche at Rust (1515), the Servite churches of Stotzing (1610), and that of Loretto (1644), to the active years of the great schloss buildings, which begin with Kittsee, in 1668, a graceful design with fine, carved, caryatid figures at the main entrance. Schloss Halbthurn is of the same class; and garden architecture now makes its appearance on these fair scenes, adding art to Nature.

But the chief glory of the Burgenland is Eisenstadt, twelve miles north of Sopron: town, churches, and castle, with vital interests of the Esterhazys, and their associations with masters of the various arts, including musicians, greatest among whom was Haydn. He lived for thirty years as the musical director of the great family, and his house exists in the Klostergasse, in which some fine subdued baroque is also to be found. In the Kalvarienberg the baroque, both in painting and sculpture, is much more forceful, including the rocky, realistic Ecce Homo chapel. On the site of a foundation as remote as the year 1468, the great schloss and park, seated on the lower slopes of the Leitha mountains, was built in 1683: a magnificent edifice



Encircled rock at Trescaw, Scilly. [*From* The Sacred Stone.]

with most of the best features of its period. It was added to at the beginning of the nineteenth century, and Canova contributed statuary, contrasting feebly with the robust baroque which characterizes Eisenstadt generally. Eisenstadt alone is enough to draw the student to the Burgenland, but the further treasures dealt with by Dagobert Frey in this well-illustrated volume make an architectural visit almost imperative. K. P.

Das Burgenland, seine Bauten und Kunstschätze, von Dagobert Frey. Vienna: Verlag von Anton Schroll. 8vo, pp. xxxi + plates 160. Sewn, 6s.

ARCHITECTURAL SHADOW PROJECTION

Architectural Shadow Projection, by John M. Holmes, most of which recently appeared in serial form in THE ARCHITECTS' JOURNAL, is to be published this week by the Architectural Press. The book provides a series of easily accessible solutions to the problems of shadow projection on architectural plans, elevations and sections, and aims at the elucidation of the theory of shadows in plain and practical terms with everyday examples rather than at the working out of shadows on unusual and intricate forms. The book includes twenty-four plates (size of page 13½ ins. by 9 ins.) containing about fifty large-scale diagrams, and is so arranged that complete explanatory and descriptive letterpress appears opposite each diagram, so as to avoid the turning over of leaves. Bound in full cloth, it is published at 10s. 6d. net.

OBITUARY

JOSEPH LEEMING: 1849-1929

We regret to record the death of Mr. Joseph Leeming, F.R.I.B.A., at Old Colwyn, at the age of 80. He was responsible, with his brother John, for the design of the Admiralty buildings in the Horse Guards Parade, which they won in competition in 1883, when they were little-known provincial architects. Both were born in Halifax of humble parentage: their father used to hawk coffee and tea from door to door. Among other important works executed from their designs were the Post and Telegraph Office, Lisbon, and Edinburgh Municipal Buildings (both won in competition), Glasgow Municipal Buildings, market-halls in Leeds, Halifax and Oldham, Kinloch Castle, Isle of Rhum, many churches, and a number of schools in and around Halifax.

CORRESPONDENCE

THE HONEYWOOD FILE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Having had much pleasure and enjoyment in reading the experiences of our friend Spinlove in "The Honeywood File," I would suggest that these articles (when finished) should be published in book form. What are other readers' views?

NORMAN G. DENHAM

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Allow me to congratulate both you and Karshish upon "The Honeywood File."

I shall be glad to know if it is your intention to publish this in book form, particularly before Christmas, as I cannot conceive a better present to send to anyone in the profession who has had the misfortune not to have already read the articles.

C. W. LUCAS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I should like to congratulate you on the series you have been running, entitled "The Honeywood Files."

These are by far the best of their kind I have seen, and it would be interesting, no doubt, to many of your readers to know whether it is proposed to issue them in book form.

FRANK BLOOMER

[The Architectural Press hope to publish "The Honeywood File" in book form about the middle of December.—Ed., A. J.]

POWER TRANSMISSION

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Sweden possesses many examples of overhead high power transmission which form useful illustrations of what we may expect to be the appearance of the English countryside under a similar system. In the southern agricultural districts of Skåve, and in the plains north and west of the great lakes, the pylons carrying the cables across the fields are aggressive and ugly, but in the hilly and wild parts they are barely visible.

Near Kungsbacke, east of Göteborg, a line of high power cables is carried across the crest of the hills in the neighbourhood of Lake Lafven, and the appearance of these towers striding along the skyline is no disfigurement to that wild landscape. Even at the great power station of Trallhatten the maze of transmission cables does not spoil the view to any extent from the hill above the falls. The moral seems to be that in England the uninhabited districts such as the Lake Country, Downland, or Salisbury Plain will suffer least from these cable towers, and the Midland farming districts and unofficial beauty spots that are "Just England" will suffer most.

View of front façade of Castle at Kittsee



[*From* Das Burgenland.]

In Switzerland the same phenomena may be noticed, and the transmission towers in the wilder valleys are far less unsightly than those in the more cultivated ones. Another argument for adopting such routes in Switzerland would be the law that prevents building within fifteen feet each side of a line of cables, a restriction that will certainly have to be imposed in England, and may prove a very real hardship to landowners in many parts of the country.

L. E. WILLIAMS

SOCIETIES AND INSTITUTIONS

AN AUSTRALIAN SCHOLARSHIP

Mr. Dudley Rowland Ward, who was awarded the Australian medallion and travelling scholarship of £400, given by the Board of Architects of New South Wales, has just arrived in England. He is a graduate in architecture of the University of Sydney, and will probably spend three years in Europe.

WIMBLEDON TECHNICAL INSTITUTE

An interesting exhibition of students' work was recently held at Wimbledon Technical Institute and School of Art. The architectural classes were commenced three years ago; they have rapidly developed and reached a most encouraging level. The majority of the architectural students are employed in offices during the daytime, and attend the architectural and building construction course in the evenings.

Mr. Collister, A.R.C.A., is the headmaster of the School of Art, and Mr. S. H. Loweth, A.R.I.B.A., senior lecturer in architecture and building construction.

It is apparent from the exhibition that the students are instructed to think out their architectural problems primarily as those of construction, and to evolve designs on the theory that architecture is the result of perfect building.

EGYPTIAN ARCHITECTURE

Sir Banister Fletcher, F.R.I.B.A., F.S.A., lecturing at the Central School of Arts and Crafts on Egyptian architecture, said that to understand the influence which controlled Egyptian architects one must enter into the spirit of their religious beliefs, and appreciate their social conditions, besides giving due importance to the unusual geographical, geological, and climatic conditions of that mysterious land. The Pyramids, the greatest monuments of antiquity that have come down to us, are the result of the Egyptian belief in immortality, for in them they sought to preserve the body for the return of the soul.

He explained that the powerful priesthood upheld the traditional, mysterious, and unchangeable religious rites reflected in the planning of the temples. A sketch of the life of Egypt in early days was followed by a review of its history from the time of the first dynastic king, over six thousand years ago, to the present day.

Sir Banister then described, with many illustrations, the features which characterize the buildings of the Nile, referring in turn to the planning of the temples, the sloping walls (giving an appearance of great stability), often incised with sculptured scenes, the imposing colonnades with their wonderful variety of sculptured capitals, and finally a survey of Egyptian ornament, from the painted scenes and symbols down to the treatment of domestic furniture.

THE GUVNORS' CLUB

The inaugural dinner of the newly-formed Guvnors' Club was held in the Pillar Hall, Olympia, on October 7. The title of the club is derived from the term applied to the general foreman of any big contracting job, who is always referred to as the "Guvnor." The Club has been formed to promote friendship among them. Their first president is Mr. Vincent Gluckstein, a director of Messrs. Bovis, Ltd.

The dinner was laid in a setting representing a contracting job, and the fare was served with the aid of contractors' plant in miniature.

On arrival, the guests were announced by a "navvy," and then filed through to the dining-room, where, before entering, each person "clocked-on." "Bricks," concrete mixers, cranes, hoists and other gear served the company with good fare, whilst the sweets were served on mortar-boards, with a trowel in the centre for the guest to help himself.

From one of the hoardings which served as a wall, and with the use of light scaffolding, a "conveyancer" ran down to the centre of the hall, carrying the "bricks" and bags full of rolls. The bricks were cleverly got up in cardboard boxes, and contained cigars and cigarettes.

The necessary silence for the various toasts and artistes was obtained by a "bricklayers' labourer" striking a block of wood with a sledge hammer. The toasts were drunk out of billycans. The unique menu card, which was presented in the form of a builders' specification, was printed on a card of cedar and mahogany. A preliminary note on the menu stated, "All work to be kept wet. Flush up at every course." Truly an admirable suggestion!

Future sessional meetings of the Institution of Heating and Ventilating Engineers will be held at Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1.

COMPETITION CALENDAR

No date. The General Electric Company, Ltd., is to erect a "Pavilion of Light," including a suite of six rooms, at the 1930 *Daily Mail* Ideal Home Exhibition at Olympia, Kensington, S.W. The lounge, dining-room, bedroom, and nursery will be the subjects of one section of the competition for architects and decorative artists, while the kitchen and bathroom will be the basis of another for electrical contractors, with the object of demonstrating the ideal use and security of electrical equipment in these rooms. When the results of the competition have been decided by a committee of assessors, whose names will be announced later, the winning designs will be incorporated in the "Pavilion of Light." Full particulars and rules of the competition will be announced later.

No date. Competition for the best-designed labour-saving houses in three types, priced at £750, £850, and £1,000 respectively. Premium: 100 guineas. Application for conditions of the competition, etc., should be made to C. E. Oxley, Secretary, B.C.S. Housing Scheme, Chaddeston, Park Road, Derby.

November 2. The City of Birmingham Museum and Art Gallery Committee propose to erect a Branch Art Gallery at the Pebble Mill Road entrance to Cannon Hill Park, and invites architects practising within the City boundaries to submit competitive designs. Total cost, £6,000. Assessor: Ernest C. Bewlay, F.R.I.B.A. Premium: £100. Application for conditions of the competition, etc., should be made to S. C. Kaines Smith, Keeper, Museum and Art Gallery, Birmingham. Deposit 10s. 6d. Latest date for submitting designs: November 2.

November 8. The Somerset Rural Community Council, in conjunction with the R.I.B.A., invite architects and architectural assistants resident in Somerset to submit designs for Country Garages and Petrol Filling Stations. Assessor: Harold E. Todd, A.R.I.B.A. Prizes: The "Sir Charles Wakefield" prize, £10 10s. and silver cup presented by the Somerset Automobile Association. Further prizes of £7 7s., £5 5s. and £3 3s. and two cups presented by the S.A.A. Particulars from the Secretary, Somerset Rural Community Council, 42 Bridge Street, Taunton. Deposit 10s. 6d.

January 1. The Aberystwyth Town Council invite architects to submit competitive designs for the erection of a Municipal Pavilion with Refreshment Rooms and other conveniences on the site of the old Waterloo Hotel, at the corner of the Marine Parade and Terrace Road, extending to Bath Street. Assessor: Arnold Thornely, F.R.I.B.A. Premiums: £100, £70, and £30. Application for conditions of competition, etc., should be made to T. J. Samuel, Town Clerk, Town Hall, Aberystwyth. Deposit, £2 2s. All designs must be sent to the Borough Surveyor, Corporation Offices, Smithfield Road, Aberystwyth, not later than January 1, 1930.

February 28.—The Accrington Corporation invite architects of British nationality to submit designs in competition for new Police and Fire Stations which it is proposed to erect on a site in Manchester Road, Accrington. Assessor: Herbert J. Rowse, F.R.I.B.A. Premium: £250, £150 and £100. Conditions of the competition, together with a plan of the site and all particulars from William Henry Warhurst, LL.B., Town Clerk, Town Hall, Accrington. Designs to be submitted before February 28, 1930.

TRADE NOTES

Messrs. T. W. Palmer & Co. have fixed five pairs of wrought-iron gates on the Roland Hill Memorial, which was opened at the Twickenham rugby ground on October 5.

A persistent rumour has recently been in circulation to the effect that the Macintosh Rubber Mills in Cambridge Street, Manchester, are closing down. As is well known, there was a fusion of Macintosh and Dunlop interests a few years ago, and the Cambridge Street plant has for some time been a Dunlop group factory. There is no foundation for the rumour, but we understand from the Dunlop Company that, owing to the very big expansion in the demand for Macinlop general rubber goods, and the desirability of concentrating the manufacture of solid tyres in the Cambridge Street mills, it has been found necessary to transfer the manufacture of some pneumatic tyres and tubes, hitherto carried on in the Manchester works, to Fort Dunlop. This leaves the Manchester factory in a better position to cope with the growing business in mechanicals, flooring, tiling, hose, belting, etc., and concentrates pneumatic tyre manufacture at the logical centre.

The accompanying illustration shows the Tudor model two-kw. imitation coal fire, and is reproduced from one of the new folders issued by Messrs. Metro-Vick Supplies. This is one of the new models placed upon the market by the firm. The coal-fire effect is obtained by means of a standard flame lamp placed at the back of the fire. Each element bar is controlled by a separate switch. On both models the lamp is controlled independently from the elements, and therefore the fire effect can be obtained when the elements are not switched on. This model is one of the many fires, illustrated and described in the folders, which have achieved considerable popularity.



The new Metro-Vick Tudor model imitation coal fire.

THE BUILDINGS ILLUSTRATED

Following is a list of the specialists, general contractors, and some of the sub-contractors for the buildings illustrated in this issue :

The Underground Building (pages 558–65). Sculptors : Epstein, Gill, Wyon, Rabinovitch, Moore, Aumonier, Armitage.

General contractors, Foundation Co., Ltd. Sub-contractors : John Mowlem & Co., Ltd., excavation and foundations; Limmer and Trinidad Asphalte Co., dampcourses and asphalt; Trussed Concrete Steel Co., Ltd., reinforced concrete engineers, reinforced concrete and fireproof construction; Pluckley Brick and Tile Co., Ltd., and Leeds Fireclay Co., Ltd., bricks; Metropolitan Stone Co., stone; Rubery Owen & Co., Ltd., structural steel; Mather and Platt, Ltd., sprinklers; Waygood Otis, Ltd., letter chutes and lifts; W. B. Simpson and Sons, Ltd., Art Pavements and Decorations, Ltd., Leeds Fireclay Co., Ltd., and Marbello, Ltd., tiles; Molar Brick and Roneo, Ltd., partitions; "Vita" Glass Marketing Board, glass; British Challenge Glazing Co., patent glazing; Acme Flooring and Paving Co., woodblock flooring; Lardon Plywood and Timber Co., flooring; Richard Crittall & Co., Ltd., central heating, boilers, and electric heating; Bratt Colbran & Co., stoves and grates; Osler and Faraday, Troughton and Young, and General Electric Co., Ltd., electric light fixtures; Keith and Blackman, ventilation; Higginbotham and Son, plumbing; Shanks & Co., sanitary fittings; Gibbons, door furniture; Hope Bros., casements and window furniture; J. R. Pearson, folding gates; Roneo, Ltd., rolling shutters; Chubb, fireproof doors; General Iron Foundry, iron staircase; Modellers and Plaster Decorators Co., decorative plaster; Birmingham Guild, Hope Bros., J. R. Pearson, and J. M. Pirie & Co., metalwork; Shapland and Petter, and Howard and Sons, joinery; Fenning & Co., Jenkins, and Art Pavements and Decorations, Ltd., marble and tiling; Bratt Colbran & Co., and Fenning & Co., mantels; Haskins Bros., and Parnall & Co., shop fittings; Roneo, Ltd., office fittings; Morris Runway, cranes; Synchronome Co., clocks; Isler & Co., water supply; K.F.M., signs.

Redalon was used to obtain an efficient bond between the sections of the retaining wall. It was also used on all the heating coil panels, and wherever plaster or cement renderings were being applied direct to the concrete.

North-Western Polytechnic (pages 566–70). Joint quantity surveyors, Horace W. Langdon and T. J. Moody. General contractors, Nox Ltd. Sub-contractors : Harold Cooper, and Morris Singer & Co., railings and ornamental ironwork; Walter Cassey, Ltd., and Yannedis, Ltd., door furniture; Mellowes & Co., Ltd., metal sashes; Henry Hope & Sons, Ltd., ornamental metal sashes and skylights; Somerville Barnard & Co., constructional steelwork; Diespeker & Co., Ltd., terrazzo paving; Acme Flooring Co., Hollis Bros., and Ebner, Ltd., wood block paving; Cash & Co., heating and ventilation; J. R. Venning & Co., sanitary fittings; Concrete Ltd., hollow block concrete roofing; Ames and Finnis, Ltd., roof tiling; J. Boulton & Co., internal tiling; Aldous and Campbell, liftwork; Marbello, jointless flooring; Power Contracts, Ltd., electrical lighting and power installations; E. J. and A. T. Bradford, Ltd., carving; Merryweather and Sons, hydrants; the Gas Light and Coke Co., gas services; Holborough Cement Co., Ltd., cement; Dorking Brick Co., facing bricks.

Pavilion for Newcastle Chronicle, Ltd., North-East Coast Exhibition (page 580). General contractors, Henry Kelly, Ltd. Sub-contractors : Wright Anderson & Co., Ltd., steelwork; Ruberoid, Ltd., flat roof covering; Reid and Sons, clock; Robson and Coleman, electric lighting; M. Aynsley and Sons, Ltd., hardware; Hardy & Co., Ltd., sunblinds.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

29283. Beckett, T. F., and Ewen, R. D. Domestic fireplaces. September 27.

29368. Booth, C. C. Window sills. September 27.

29370. Booth, E. Winches, hoists, etc. September 27.

29368. Booth, P. M. Window sills. September 27.

29238. Crellin, G. C. Gore. Construction of hotels, ships, etc. September 26.

SPECIFICATIONS PUBLISHED.

319412. Leschziner, O. Apparatus suitable for use as a fire-escape, portable scaffolding, or other similar purpose.

292481. Heath, F. T. Building-block and wall construction.

319299. Bart, B. Hollow internally-reinforced structures or structional units.

293035. Penteppidan, C. Hydraulic cement.

319524. Price, F. G. Ornamental paving-slab.

ABSTRACT PUBLISHED

317116. Reinforced concrete. Carson, N. B., Glasgow.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

In connection with the Grosvenor housing scheme the WESTMINSTER City Council proposes to instruct Sir Edwin Lutyens to prepare working drawings and obtain tenders for another block, so that the scheme may be commenced early in the new year.

Plans passed by the HACKNEY B.C.: Workshop, rear of 28 Pembury Grove, for Mr. C. G. Eaglen; shop, adjoining 63 Warneford Street, for Messrs. G. Butters and Sons; warehouse, Tower Street and Richmond Road, for Messrs. Hal Williams & Co. on behalf of Messrs. Lipton, Ltd.; fifteen houses, Brooke Road and Nightingale Road, for Mr. H. W. Binns.

Plans passed by the WESTMINSTER City Council: Shelters, Savoy Theatre, for Messrs. Easton and Robertson; building, rear of 11 Belgrave Square and Wilton Terrace, for Mr. W. E. Hazell; building, Grosvenor Road, for Sir Frank Baines; sun room, 31 Green Street, for Messrs. Trollope and Sons; Leicester Square Theatre, St. Martin's Street and Leicester Square, for Mr. A. Mather; house, 103 Eaton Square, for Mr. F. E. Bennett.

Plans passed by the LEWISHAM B.C.: Twenty-six houses, Crantock Road, for Mr. H. R. Watt; thirty-seven houses, London County Council Downham housing estate, for Mr. J. G. Stephenson; twenty houses, Malyons Road, for Mr. P. B. Dannatt; additions, 90 Peak Hill, for Messrs. Walter Cobb, Ltd.; twelve houses, Selworthy Road, for Messrs. Durling and Sons; two houses, Ashgrove Road, for Mr. A. A. Smith; garages, Sydenham Hill Road, for Mr. E. A. Bawcutt; garages, Rhyme Road, for Mr. W. R. Stacey.

SOUTHERN COUNTIES

The EASTBOURNE Corporation is to consider the provision of swimming baths in the Redoubt scheme.

The KENT Education Committee is acquiring a brewery site at Dartford for the erection of a technical college.

Plans passed by the DARTFORD U.D.C.: House, Carrington Road, for Mr. W. R. Mackney; two houses, Havelock Road, for Mr. H. C. Wright; house, Summerhouse Drive, for Mr. E. Lucas; two houses, Dover Road, for Mr. W. F. Summers; two houses, Princes Road, for Mr. G. H. Giles; two bungalows, Watling Street, for Mr. L. Fuller; block of flats, Lawrence Hill Road, for Mr. W. J. Brise.

Plans passed by the PORTSMOUTH Corporation: Offices and stores, Buckingham Street, for Messrs. Roy Corke, Ltd.; three houses, Selsey Avenue, for Mr. M. R. Berney; bakery and dairy depots, 41 High Street, Cosham, for Portsea Island Mutual Co-operative Society, Ltd.; seven houses, Randolph Road, for Mr. A. W. Stevenson; three houses, Burbidge Road, for Mr. W. Ward; six houses, Brecon Avenue, Cosham, for Mr. J. C. Nicholls; additions, Melville High School, Waverley Road, for Messrs. J. Lay & Co.; dairy, Upper Park Road, Cosham, for Mr. H. Soar; eleven houses, Kensington Road, for Messrs. Wade and Connor.

Plans passed by the EASTBOURNE Corporation: Alterations and additions, 49 Meads Street, for Mr. G. E. Holditch, architect; two houses, Northiam Road, for Mr. C. M. Wood, architect; two houses, Dillingburgh Road, for Mr. A. J. Fellows; block of flats, Upperton Road, for Mr. B. Stevens, architect; house, Decoy Drive, for Mr. B. Stevens; shelter, Lynchmere Football Ground, for Mr. C. M. Wood, architect; conversion into flats, "St. Mary's," Bolsover Road, for Mr. F. G. Cooke; extension of shop premises, New Upperton Road, for Messrs. P. D. Stonham and Son, architects; additions, Imperial Hotel, Devonshire Place, for Messrs. G. Bainbridge and Son.

SOUTH-WESTERN COUNTIES

The BRISTOL Corporation has decided to erect, by direct labour, 144 houses on the Shirehampton estate at a cost of £69,780.

The TRURO Corporation is to undertake sewerage works at a cost of £60,000, and is negotiating for 6½ acres of land at Bosvifo Farm for a housing scheme.

The CHELTENHAM Corporation has obtained sanction to borrow £32,037 for the erection of fifty-eight non-parlour and six parlour houses in Kipling and Shakespeare Roads.

Plans passed by the CHELTENHAM Corporation: House, Whaddon Road, for Mr. J. Davis; workshop, Kingsley Gardens, Gloucester Road, for Mr. W. R. Birchley; alterations, Y.M.C.A., promenade for the Y.M.C.A. committee; new operating chamber and lavatories, Opera House, Regent Street, for Cinema House, Ltd.; house, Nauton Lane, for Mr. T. W. Smith; two houses, Pilford Avenue, for Messrs. Bendall and Sons; two houses and builders' workshop, Shurdington, for Messrs. E. Miles and Son; bungalow, Leckhampton Hill, near Blackhedge Farm, for Miss Hind; bungalow, Coombe Hill, for Mr. Western; three houses, Battledown Approach, for Mr. G. A. Hawkins; new business premises, Gloucester Road, for the Gloucester Co-operative Society, Ltd.

EASTERN COUNTIES

Plans passed by the COLCHESTER Corporation: House, Victoria Road, for Mr. T. J. Smith; house, Beech Hill, Lexden, for Messrs. E. D. Lyons and T. North; house, Ireton Road, for Messrs J. Moss and Son; house, Ipswich Road, for Mr. A. S. James; house, Ipswich Road, for Messrs. H. G. Pryke and Son; house, Audley Road, for Mr. W. H. S. Smith; two houses, off Old Heath Road, for Mr. C. Fisher; house, Abbots Road, for Mr. A. E. Sparrow; two shops, London Road, Lexden, for Mr. A. T. Clarke; shop, North Hill, for Messrs. Duncan Clark and Beckett; four shops, London Road, Lexden, for Messrs. Goodey and Cressall; additions, Claudius Road, for Colchester and East Essex Co-operative and Industrial Society, Ltd.; shop, Mile End Road, for Mr. C. H. Green.

MIDLAND COUNTIES

The BURTON-ON-TRENT Corporation is to prepare a scheme for the erection of 130 houses on an estate near Horninglow Road.

The SMETHWICK Corporation is to obtain sanction for a loan for the erection of a further ninety houses, by direct labour, on the Old Chapel estate.

Plans passed by the NORTHAMPTON Corporation: House, King Edward Road, for Messrs. E. H. Tibbs & Co., Ltd.; house, Meadway, for Mr. R. M. Pell; fourteen houses, Park Avenue, for Messrs. A. Glenn and Sons, Ltd.; alterations and additions, 61 Abington Street, for Mr. G. Clayson; eleven houses, Highfield Road, for Messrs. S. G. Sale & Co.; twelve houses, Park Avenue, for Messrs. A. P. Hawtin and Sons, Ltd.; sub-station, Alfred Street, for Northampton Electric Light and Power Co., Ltd.; two houses, Ardington Road, for Northampton Co-operative Society, Ltd.; two houses, Holyrood Road, for Messrs. W. S. Brown and Son.

Plans passed by the SMETHWICK Corporation: Four houses, Pitcairn Road, for Messrs. W. C. Stevens, Ltd.; alterations, 416 Bearwood Road, for Messrs. W. H. Scott and Son; alterations, premises at Church Lane, for the Birmingham Co-operative Society, Ltd.; four houses, Ernest Road and Heather Road, for the Excelda Housing Society, Ltd.; six houses, Heather Road, for Messrs. Lloyd Bros.; two houses, West Park Road, for Messrs. W. Lees and Sons; ten houses, St. Paul's Road, for Mr. J. C. Jones; workshop, 18 Rabone Lane, for Messrs. Horton and Davies; additions to premises, Bridge Street, for the Smethwick Stamping Co., Ltd.; extension to works, Wills Street, for Messrs. Wilmot Breeden, Ltd.; lavatory accommodation and extension to market, Windmill Lane, for Messrs. Lloyds Estates and Markets, Ltd.; extension to North Works, Hallfords Lane, for Messrs. Henry Hope and Sons, Ltd.; extensions, Mafeking Road, for Pneulec, Ltd.; extension to works, Dartmouth Road, and office, East Works, Dartmouth Road, for the Birmingham Aluminium Casting (1903) Co., Ltd.; new rink cinema, Windmill Lane; new inn, Abbey Road and Thimblemill Road.

NORTHERN COUNTIES

The BRADFORD Education Committee has asked the city architect to prepare plans for the erection of a nursery school at Wapping Road.

The BIRKENHEAD Corporation is seeking sanction to borrow £38,400 for the layout and erection of buildings at the proposed new cemetery.

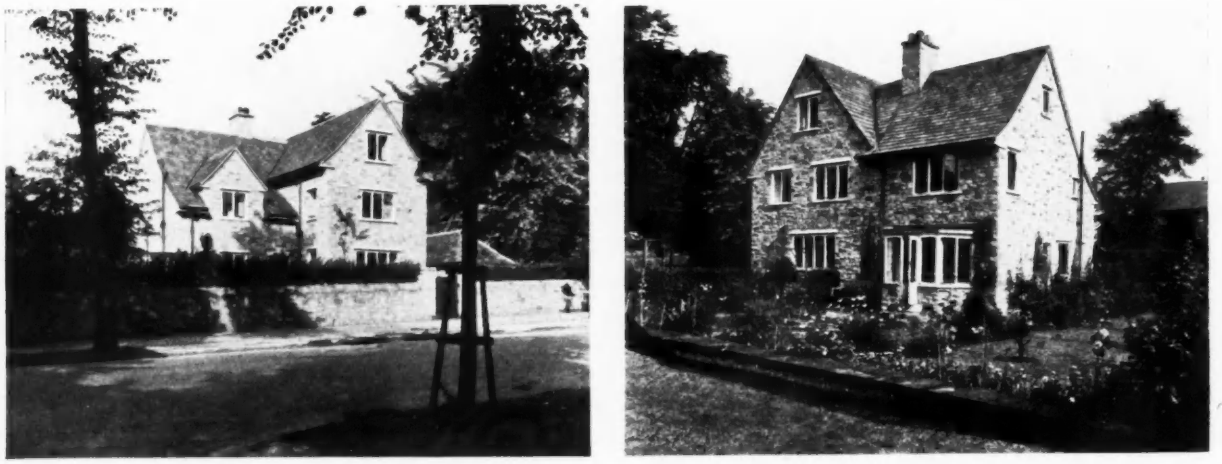
The LEEDS Corporation has obtained sanction to borrow £10,350 for extensions to the maternity hospital.

The ROTHERHAM Corporation has instructed the borough engineer to prepare a scheme for the erection of approximately four hundred additional houses on the Herringthorpe estate.

Plans passed by the CARLISLE Corporation: Wash-houses, coal stores, etc., James Street, and extension to boiler house, Margaret Street, for Messrs. Hudson Scott and Sons, Ltd.; house, Burgh Road, for Mr. H. E. Scarborough, architect

Plans passed by the OLDHAM Corporation: Four houses, Oriel Avenue, for Messrs. Hawthorne and W. and H. Bloor; manager's office, Union Street, for Palladium Pictures, Ltd.; reconstruction of towers, shop, Rochdale Road, for Messrs. E. Whittaker, Ltd.

Plans passed by the LEEDS Corporation: Three houses and shops, Tinshill Lane, for Messrs. Mitten and Crowther; house and shop, Roper Grove, for Messrs. Lazenby Brothers; two houses,



House, Kenwood Park, Sheffield. Designed by J. Mansell Jenkinson. The main front (left) and the garden front (right). This house has been built by the architect for his own occupation. The walls are of local stone and are lined with brickwork. The roofs are covered with rustic slates specially selected for their thickness.

Selby Road, for Mr. George Morritt; six houses, Alexander Avenue, Howard Avenue and Broadway, Crescent estate, for Messrs. Dunhill Brothers.

Plans passed by the STRETFORD U.D.C.: School, Low Moss Lane, for the U.D.C.; extension to store, Ashburton Road, for British Reinforced Concrete Engineering Co., Ltd.; extension to store, off Park Road, for Messrs. D. Anderson and Son, Ltd.; extension to works, Westinghouse Road, for Messrs. Redpath, Brown & Co., Ltd.; shipping bay, Westinghouse Road, for Metropolitan Vickers Electrical Co., Ltd.; dance hall, 433–35 Chester Road, for Mrs. Reed; extension to café, Warwick Road North, for Mr. C. Woodruff.

Plans passed by the SHIPLEY U.D.C.: Boilerhouse, greenhouse and extensions to garage, 16 Bankfield Road, for Mr. J. H. Mason; cooling and sterilizing rooms, High Ash Farm, Westfield Lane, for Mr. J. Kay; two shops, Gaisby Lane, for Mr. F. Dalby; two houses, Aireville Avenue, for Messrs. Clark and Denham; sixteen houses, Aireville Grange, Aireville Avenue and Aireville Drive, for Mr. J. Chippindale; fourteen houses, Nab Wood Terrace, for Messrs. William Pitts and Sons; two houses, Redburn Drive, for Mr. H. Dawson.

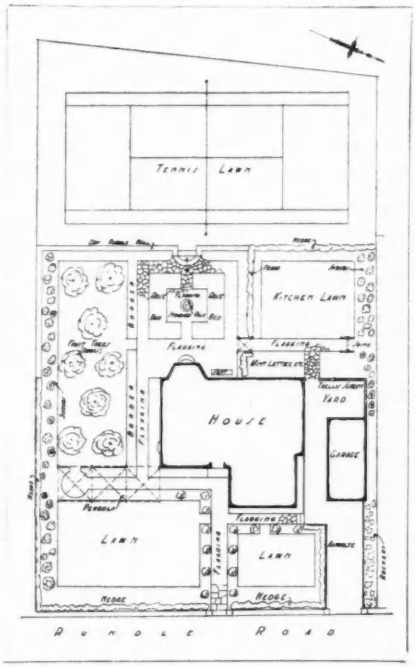
Plans passed by the ROTHERHAM Corporation: Stores and workshops, Bridgegate, for Messrs. E. Russum and Sons, Ltd.; extensions, mills, Sheffield Road, for United Strip and Bar Mills, Ltd.; club and two shops, Masbro' Street, for Miss Chester; additions, club, Meadowhall Road, for Miners' Welfare Committee; club, St. Leonard's Road, for St. Stephen's Church churchwardens; classrooms, Lister Street, for Rotherham Wesleyan Circuit; extensions, club, Far Lane, for Eastwood Miners' Welfare Committee; laboratory buildings, Alsing Road, for Messrs. Howell & Co., Ltd.; extensions, Nottingham Street, for Dean's Electrical and Engineering Co.

Plans passed by the BOLTON Corporation: Additions, Rumworth Cinema, St. Helens Road, for the Bolton Cinematograph Co., Ltd.; additions, Theatre Royal, Churchgate, for the Bolton Theatre and Entertainments Co., Ltd.; workshop, Romer Street, for the Haslam Fire Extinguisher Co., Ltd.; streets, off Ellesmere Road, for Sir W. B. Hulton; thirteen houses, off Ellesmere Road, for Mr. Maurice Welch; six houses, off Oakenbottom Road, for Messrs. Winder Bros.; house, St. Helens Road, for Mr. James Bateson; four houses, Higher Swan Lane, for Mr. W. Reddyhough; workshop and office, Huxley Street, for Mr. E. Young.

Plans passed by the SHEFFIELD Corporation: Forty-two houses, Wybourne Estate, for the Corporation; house and shop, Southey Hill, for Mr. S. Fox; two houses, Richmond Road, for Messrs. W. and E. Sadler, Ltd.; two houses, Donnington Road, for Mr. J. C. Mason; five houses, Folds Lane, for Messrs. Bingham and Worthington; four houses, Dobcroft Road, for Mr. J. W. Ardern; two houses, Whirlow Grove, for Mr. H. Holt; two houses, Blair Athol Road, for Mr. W. Fox; six houses, Delph House Road, for Messrs. T. and W. Simpson; three houses, Dalewood Road, for Mr. J. T. Redmile; two houses, Abbey Lane, for Messrs. Hutchinson and Clapham; three houses and shops, Main Road and Catcliffe Road, for Messrs. Swycher Bros.; two houses, Pingle Avenue, for Mr. E. Sivil.

Plans passed by the CHESTERFIELD Corporation: Extension to cellulose works, Brampton, for Messrs. Robinson and Sons, Ltd.; alterations and additions, Low Pavement, for Messrs. W. D. Botham and Sons; new schools, Boythorpe, for the Chesterfield Education Committee; new siding, off Sheffield Road, for Messrs. Lamp Caps, Ltd.; oil store, Whittington Blacking Mills, for Messrs. Wm. Cumming & Co., Ltd.; house, Rhodes Avenue, Highfield Estate, for Mr. H. Wholey; extension to workroom, pottery, Whittington Moor, for Messrs. Pearson & Co., Ltd.; two houses, Hawksley Avenue, for Messrs. J. Collis and Sons, Ltd.; bungalow, Storrs' Road, for Mr. Geo. Webber; two houses, Alexandra Road, for Mrs. D. H. Ervine; alterations and additions to building, School Board Lane, for Messrs. Robinson and Sons, Ltd.; layout of land, Storrs' Road, for Messrs. J. Collis and Sons, Ltd.

Plans passed by the BRADFORD Corporation: Two houses, Cyprus Drive, for Mr. J. E. Keighley; two houses, Cross Road, and four houses, Harbour Road, for Messrs. R. J. Patchett, Ltd.; eight houses, Westwood Grove and Idle Road, for Messrs. Mawson and Scott; ten houses, Mayo Crescent, for Mr. A. Robinson; four houses, Elton Grove, for Messrs. Ellis Balmforth and Son; four houses, Briarwood Grove, for Mr. J. A. Groves; four houses, Frimley Drive, for Mr. J. Priestley; two houses, Thornbury Avenue, for Messrs. A. Cansfield and Son; ten houses, Leeds Road and Cross Road, Idle, for Mr. T. E. Feather; sixteen houses, Third Avenue, for Messrs. J. H. Pitchers and Son; six houses, Hutton Road, for Mr. C. Chambers; eight houses, Lynton Drive and Wheatlands Grove, for Messrs. Smith and Chippindale; four houses, Lister Avenue, for Mr. G. H. Briggs; two houses, Crow Tree Lane, for Messrs. F. Cockroft and W. Shincup; four bungalows, Carr Bottom Road, for Mr. J. Priestley; five houses, Aberdeen Place and Spencer Road, for Mr. F. Cresswell; two bungalows, Hawes Drive and Hawes Terrace, for Mr. J. Priestley; and one house, Carr Bottom Road, for Mr. A. Woodhead.



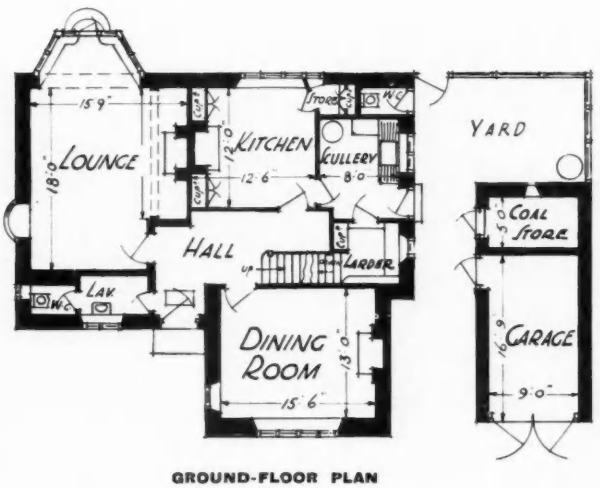
The layout plan of garden, Kenwood Park, Sheffield. By J. Mansell Jenkinson.

Plans passed by the YORK Corporation: Assembly hall, 69 Petergate, for the governors of York College for Girls; store, 194 Burton Stone Lane, for Mr. A. Duck; additions, 11 Monkgate, for Messrs. B. Smith and Sons, Ltd.; additions, 22, 24 and 26 Blossom Street, for York Railwaymen's Club and Institute; public hall, Heworth, for Heworth Conservative Association; house, Bootham Crescent, and house and shop, Burton Stone Lane, for Messrs. H. Colman and Sons; two houses, Oakland Avenue, for Mr. H. C. Deburgh; two houses, Grange Garth, for Messrs. R. K. Pulleyn and Sons; two houses, Millfield Lane, for Mr. T. G. Harrison; additions, "Five Lions" hotel, Walmgate, for Tadcaster Tower Brewery Co., Ltd.; machine shops, Peaseholm Green, for Adams-Hydraulics, Ltd.; additions, Fenwick Street, for Messrs. Fortifex, Ltd.; additions, Spurriergate, for Messrs. F. W. Woolworth & Co., Ltd.; additions, Board Inn, Pavement, for Messrs. J. J. Hunt, Ltd.; additions, Burton Stone Inn, Clifton, for Tadcaster Tower Brewery Co., Ltd.; additions, 90 Goodramgate, for Messrs. Bowdens; additions, Fenwick Street, for Messrs. Rowntree & Co., Ltd.; additions, Fishergate, for Rialto Cinema; two houses, Cornborough Avenue, for Mr. J. Dowling; additions, Bootham Crescent, for Burton Lane Club and Institute; five houses, Muncaster estate, for Mr. Denby Collins; four houses, Poppleton Road, for Messrs Simpson Bros.; two houses, Tadcaster Road, for Messrs. Hy. Atkin and Son.

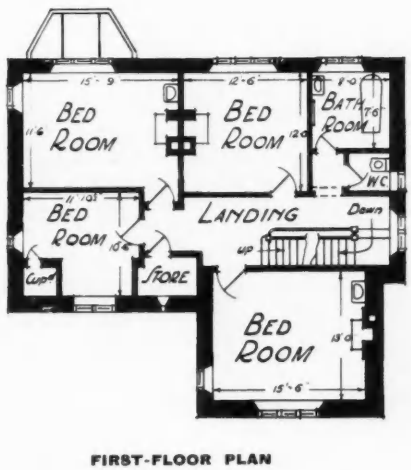
SCOTLAND

Messrs. Mactaggart and Mickel, Ltd., are to erect thirty-two houses in Kings Park Avenue; 186 houses in Carmunnock Road, and four shops in Aikenhead Road, Cathcart, GLASGOW.

The following figures show the progress that has been made in state-aided housing schemes in Scotland to August 31, 1929: 1919 Act, 25,129; 1919 Act, by public utility societies, 421; private subsidy schemes (1919 Additional Powers Act), 2,324; slum clearance schemes, 10,366; under construction, 1,914: 1923 Act, by local authorities, 4,012: 1923 Act, by private enterprise, 16,217; under construction, 2,034; 1923 Act, by public utility societies, 80: 1924 Act, by local authorities, 37,327; under construction, 7,719: 1924 Act, by private enterprise, 1,187; under construction, 999: 1924 Act, by public utility societies, 127; demonstration houses, 17; steel houses erected on behalf of Government by Scottish National Housing Company, 2,552. Total completed, 99,759; total under construction, 12,666. Total, 112,425.



GROUND-FLOOR PLAN



FIRST-FLOOR PLAN

House, Kenwood Park, Sheffield. Designed by J. Mansell Jenkinson. The ground- and first-floor plans. The interior joinery is of pine, stained and finished eggshell, except the mantelpieces which are of oak or mahogany. The garden has flagged paths and dry rubble retaining walls.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	•1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½•
A_2	Barnard Castle	N.E. Coast	1 6	1 1½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	•1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A	Bishop Auckland	N.E. Coast	1 7½	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7½	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	•1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_1	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	•1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A	Howden ..	N.E. Coast	1 7½	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_1	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	•1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	•1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	•1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	•1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.				£0	11	6
Thames ballast, per yd.				0	10	0
Pit gravel, per yd.				0	15	0
Pit sand, per yd.				0	12	6
Washed sand, per yd.				0	13	0
Screened ballast or gravel, add 10 per cent. per yd.						
Clinker, breeze, etc., prices according to locality.						
Portland cement, per ton				£2	8	0
Lias lime, per ton				2	0	0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.						
Transport hire per day:						
Cart and horse	£1	3	0			
3-ton motor lorry	3	15	0			
Steam lorry, 5-ton	4	0	0			
Trailer				£0	15	0
Steam roller				4	5	0
Water cart				1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½
STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6	7 0
Grey-green do.	5	9 0
Green peggies, 12 in. to 8 in. long	4	13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard			
Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*]

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1⅛ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO. in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour (plus allowances in London only);* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅝ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	4	3
DO., *boiled, per gall.*	0	4	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			⅝ in.			¾ in.		
Qualities ..	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	5½	5	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, OCTOBER 23

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visits to Carreras Tobacco Factory, Mornington Crescent, N.W.1. At 11 a.m., 2 p.m., and 3.30 p.m. Only fifteen persons can attend in each party. Please state which time is preferred. **11 a.m., 2 and 3.30 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "Copenhagen, Past and Present." Second of a course of three Public Lectures by J. H. Helweg. (Lantern illustrations.) **5.30 p.m.**

ROYAL PAVILION, Brighton. Public meeting in opposition to the scheme of the Central Electricity Board in so far as it provides for the erection of steel masts carrying electric cables through the county. Chairman, the Rt. Hon. Earl Buxton, G.C.M.G. **3 p.m.**

THURSDAY, OCTOBER 24

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. Inaugural address by Col. Sir T. F. Purves, O.B.E. (President). **6 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to St. Paul's Cathedral. Canon Alexander will speak on "How St. Paul's has been Preserved." Meet inside main entrance. **2.30 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Origins of Architecture: II.—Roman." By Cecil Hallet, B.A., F.S.A. **12 noon.**

R.I.B.A., 9 Conduit Street, W.1. Meeting of Literature Standing Committee.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Ladies' visit to Messrs. Waring and Gillow's Showrooms, Oxford Street, W. **2.45 p.m.**

FRIDAY, OCTOBER 25

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chinese Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

SATURDAY, OCTOBER 26

R.I.B.A., 9 Conduit Street, W.1. Exhibition until November 2 of Designs of Students of Schools of Architecture recognized for exemption from R.I.B.A. Intermediate Examination.

WEDNESDAY, OCTOBER 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

ESSEX, CAMBRIDGE, AND HERTFORDSHIRE SOCIETY OF ARCHITECTS, Chelmsford, Essex. General Meeting at St. Albans. Meet outside the West Front of the Cathedral. **2.30 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "Copenhagen, Past and Present." Last of a course of three Public Lectures by J. H. Helweg. (Lantern illustrations.) **5.30 p.m.**

FRIDAY, NOVEMBER 1

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Gothic Woodwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Meter and Instrument Section Meeting. **7 p.m.**

SATURDAY, NOVEMBER 2

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section—Sculpture." By T. F. WILSON, F.R.S.A.I. **3 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Mears and Stainbank, Church Bell Foundry, 32 Whitechapel Road, E.1. Stations, Aldgate and Aldgate East. Party limited to 20 members only. **2.45 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, Manchester and District Branch. Visit to Davyhulme Hospital. **2.30 p.m.**

MONDAY, NOVEMBER 4

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last date for entry for R.I.B.A. Final Examination.

R.I.B.A., 9 Conduit Street, W.1. Inaugural Meeting. The portrait of Mr. Walter Tapper, A.R.A., F.S.A., painted by Sir William Orpen, R.A., will be presented to the Royal Institute, and the Medals and Diploma for a London building completed between 1926–1928 will be presented to Messrs. Easton and Robertson, FF.R.I.B.A.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C 2. Informal Meeting. **7 p.m.**

TUESDAY, NOVEMBER 5

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Practice Standing Committee.

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Ordinary Meeting. **6 p.m.**

WEDNESDAY, NOVEMBER 6

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Art Standing Committee and of the Board of Architectural Education Committee.

WESTMINSTER SCHOOL HALL (entrance in Dean's Yard). "Mystery Ships." By Rear-Admiral Gordon Campbell, V.C., D.S.O. Chairman, Viscount Burnham, G.C.M.G., C.H. Admission, 2s. 6d. **5.30 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Sessional Meeting. "Notes on Electric Warming, with special reference to Low Temperature Panel Systems," by R. Grierson, A.M.I.E.E., A.M.I.MECH.E. This Meeting will take place at Swedenborg Hall, Hart Street, W.C.1. **7 p.m.**

THURSDAY, NOVEMBER 7

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting.

R.I.B.A., 9 Conduit Street, W.1 Meetings of the Board of Architectural Education Committee and of the Board of Architectural Education Prizes and Scholarships Committee.

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "The Restoration of an Ancient Castle to Modern Use." By Sir Charles Allom, F.R.S.A. **7.30 p.m.**

FRIDAY, NOVEMBER 8

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Modern Incandescent Lighting in Kinema Studios," by W. H. Villiers and S. G. Double. **7 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Intermediate Examination until Thursday, November 14.

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Coal and its Combustion." By Andrew McCulloch, M.SC.TECH.A.I.C. **7 p.m.**

SATURDAY, NOVEMBER 9

Sunrise, 7.6. Sunset, 4.21

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to India House, Aldwych. Architect, Sir Herbert Baker, A.R.A., F.R.I.B.A. Meet at India House, at 2.45 p.m. **2.45 p.m.**

MONDAY, NOVEMBER 11

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Informal Meeting. **7 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Debate, "Panel versus Direct Heating." This meeting will take place at the Borough Polytechnic, Borough Road, Southwark, S.E.1., 7 p.m. Light refreshments, 6.30 p.m. **6.30 p.m.**

TUESDAY, NOVEMBER 12

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Visit to Carreras Factory, Hampstead Road, N.W.1. Meet at main entrance at 2.45 p.m. **2.45 p.m.**

UNIVERSITY OF LONDON, UNIVERSITY COLLEGE, Gower Street, W.C.1. "Engineering Management." First of a Course of three public Lectures by Mr. E. T. Elbourne, M.B.E., A.M.I.MECH.E. **6.30 p.m.**

WEDNESDAY, NOVEMBER 13

WESTMINSTER SCHOOL HALL (entrance in Dean's Yard). "My Solo Flight to Australia." By Squadron-Leader Hinkler, A.F.C., F.S.M., R.A.A.F. Chairman, Col. The Master of Sempil, A.F.C. **5.30 p.m.**

THURSDAY, NOVEMBER 14

THE ARCHITECTURE CLUB. Dinner at the Savoy Hotel.

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Science Standing Committee.

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "Woodworking Machinery." By Stafford Ransome, M.INST.C.E. **7.30 p.m.**

FRIDAY, NOVEMBER 15

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. "Romance of Lead in Industry." By E. Holden, F.COLL.H. **3 p.m.**

MORLEY COLLEGE, Westminster Bridge Road, S.E.1. "Housing." By E. D. Simon, M.P. **8 p.m.**

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Smoke and Health." By John S. Taylor, M.D., D.P.H.

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. At the Town Hall, Carlisle. Sessional Meeting. Discussion on "Town Planning of Built-Up Areas," to be opened by Percy Dalton, A.M.INST.C.E., A.R.I.B.A. **7.30 p.m.**

SATURDAY, NOVEMBER 16

Sunrise, 7.19. Sunset, 4.10.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Informal Visit to Houses of Parliament. Meet at Norman Porch, Victoria Tower, at 2.30 p.m. **2.30 p.m.**

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. At Carlisle: visits to the premises of the Nestlé and Anglo-Swiss Condensed Milk Co., the City of Carlisle New Electricity Works, the New Gas Works, and the new housing schemes of the Carlisle Corporation. Meet at the Town Hall at 9.30 a.m. **9.30 a.m.**

MONDAY, NOVEMBER 18

R.I.B.A., 9 Conduit Street, W.1. Meeting of Executive Committee. 4 p.m. General Meeting, with Paper by Alan E. Munby, M.A., F.R.I.B.A., on "The Design of Science Buildings." 8 p.m. Exhibition of the Work of the late Bertram Goodhue, until November 30. Open daily, between 10 a.m. and 8 p.m., Saturdays 5 p.m. Licentiate Examination to qualify for nomination for Fellowship until Friday, November 22. **4 p.m.**

TUESDAY, NOVEMBER 19

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Ordinary Meeting. **6 p.m.**

WEDNESDAY, NOVEMBER 20

WESTMINSTER CITY SCHOOL, Palace Street, Victoria Street, S.W.1. "My Experiences of Magic in West Africa." By Lady Dorothy Mills. **5.30 p.m.**

THURSDAY, NOVEMBER 21

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "Mouldings—Their Proportion and Place in Design." By E. J. Warne. **7 p.m.**

FRIDAY, NOVEMBER 22

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Smokeless Fuels." By William Gibson, M.SC.TECH.A.I.C. **7 p.m.**

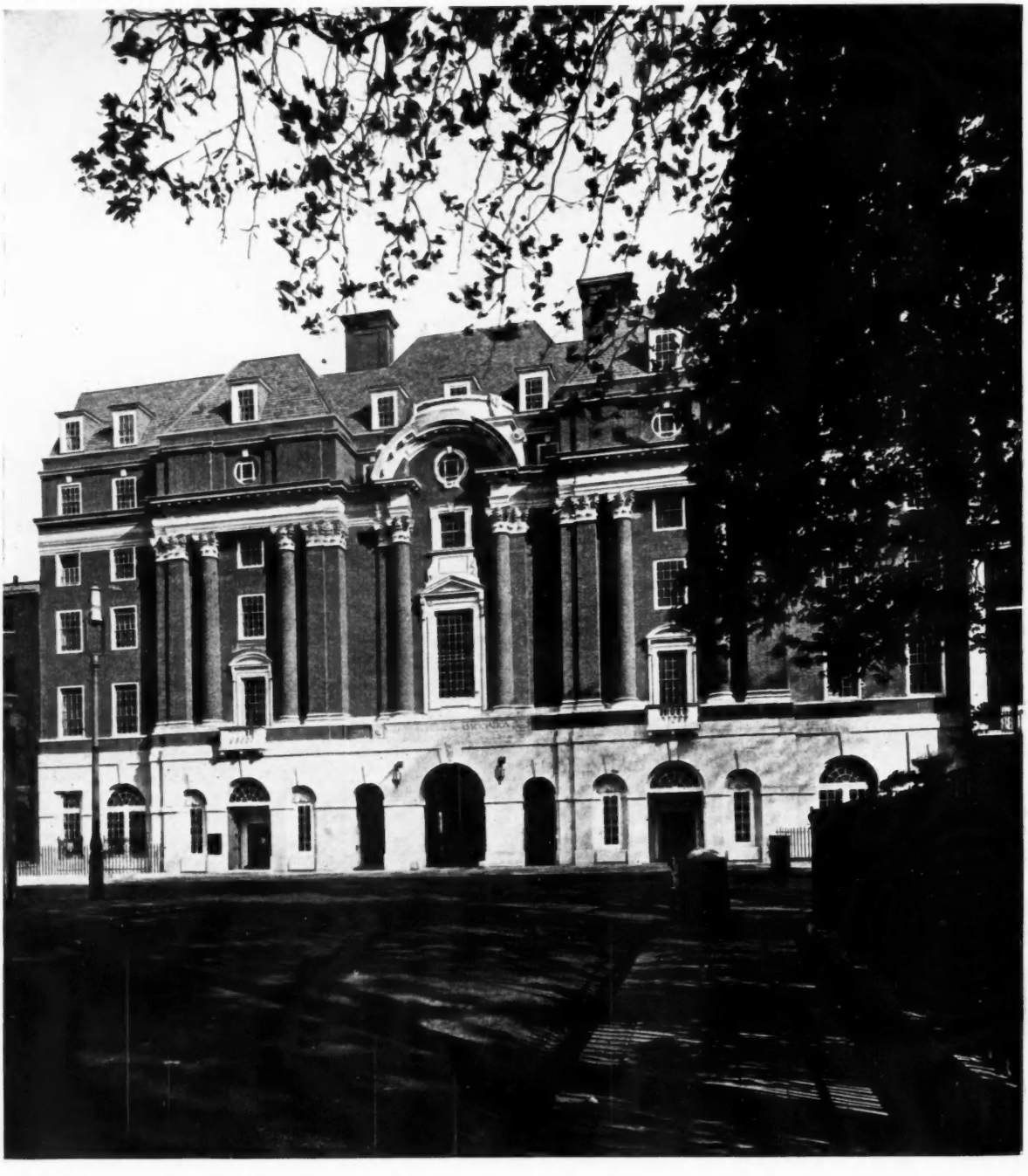
R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee.

WEDNESDAY, NOVEMBER 27

WESTMINSTER CITY SCHOOL, Palace Street, S.W.1. "By Car From Nile to Niger and Across the Sahara." By Owen Tweedy. **5.30 p.m.**

THURSDAY, NOVEMBER 28

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee.

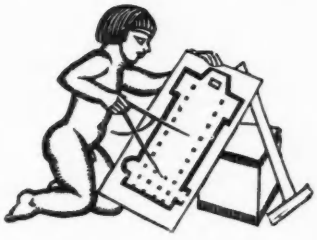


LONDON'S NEW SHRINE TO ÆSCULAPIUS.

Mr. C. Wontner Smith's addition to the Headquarters of the British Medical Association in Tavistock Square, which was inaugurated on Tuesday of last week. It is the first part of the new extension scheme and takes the form of an entrance and front to the quadrangle.

The familiar serpentine symbol is the motive of the carved keystone of the central entrance archway.

THE ARCHITECTS' JOURNAL



WEDNESDAY, OCTOBER 23, 1929

MOTOR-CAR DESIGN AND ARCHITECTURE

"The Mechanical Fallacy" Re-exposed

ONCE more the great British public is flocking to the Motor Exhibition; and among the eager crowds who inspect the latest models it is not unreasonable to suppose that a few architects will be found. It has become so common in recent years for architectural theorists to draw parallels between the design of buildings and that of ships or motor cars, that it is perhaps worth while to try to estimate the validity of these comparisons. It is a peculiar thing that nearly everybody who has devoted particular attention to one study or activity is convinced that more nonsense is talked about it than about anything else in the world. No apology is needed, therefore, for affirming that a great deal of nonsense has been talked about the relationship between architecture and the design of motor cars.

For instance, there is the common fallacy that every motor car is beautiful merely because it is bound to conform to certain practical requirements; and the assumption is that, if we only limit the formal expression of buildings to a bare compliance with utilitarian needs, architectural beauty must certainly result. This, of course, is nothing more nor less than "The Mechanical Fallacy" which was so admirably exposed by Mr. Geoffrey Scott in *The Architecture of Humanism*. Unfortunately, however, it is not sufficient to expose a fallacy once, but it must be exposed many times; unto seventy times seven, if need be. It is, indeed, rather tiresome that a mid-Victorian doctrine which was directly responsible for most of the ugliness of the industrial era should be reiterated, as if it were a grand and noble discovery, by the protagonists of the newest school of architectural "reformers." One may find solace in the reflection, however, that the engineers themselves show not the smallest inclination to yield to the too facile arguments of our modern Puritans, and are not ashamed to strive for a beauty of form which is, as it were, a luxury, something in addition to mere fitness for purpose.

It is noteworthy that in their attitude towards this important question of beauty in design, mechanical engineers differ considerably from civil or structural engineers; the reason being that the products of the former in most instances require to be covered up, while those of the latter can with more propriety be displayed to public view. Everybody knows that in the development of the motor car the most important factor is the constant improvement of the machinery by which the vehicle is driven; yet this machinery, for reasons which are both practical and æsthetic, is generally concealed within a case. Where this is not so, as in many types of motor bicycle, the result is perfectly hideous and must offend the artistic sensibilities of any person of taste, just as much as would the spectacle of a man who carried on the outside of his body various organs which are now decorously hidden in the inside. Every good engineer likes, whenever possible, to hide his machinery; and, indeed, it is true to say that, as its design becomes ever more mature, the motor car seems to give the impression of being almost ashamed of the complex mechanism from which it derives its ability to move so quickly, and acquires a suavity of form coupled with a degree of reticence which is almost uncanny.

It is important to remember that the bodies of motor cars are free to assume innumerable different shapes in accordance with the whim of the designer, and, while certain sections and profiles may offer less obstruction to the air than do others, this consideration does not prevent the engineer artists from seeking to distinguish themselves by the invention of novel patterns in which the body or carriage of the car shows itself to be independent of the restrictions which govern the design of the chassis and the engine.

In the colour schemes which are adopted, in the materials chosen, in the composition of the doors and windows of the cars, there is manifested an artistic instinct exactly similar to that which in the realm of architecture finds satisfaction in ornament and in the careful manipulation of forms to make harmonious unities. Architecture does not progress by adopting the standards of engineering; but, on the contrary, engineering can only attain a noble maturity by acknowledging the standards of architecture.

NEWS & TOPICS

THE ARCHITECTURE CLUB DISCUSSES DECORATION

AT the Architecture Club last week modern interior decoration was discussed at some length and with little tangible result. A number of very entertaining personal experiences were retailed, and the true common sense of British compromise received quite hearty support. Perhaps the most interesting contribution to the discussion was Mr. Grey Wornum's classification of modern decoration, under which most of the Parisian school, and nearly all the English exponents of the style, were labelled as followers of "Dressmakers' Architecture." The "dressmaker" style is not to be confounded with over-elaboration or fussiness, since it is just the quality of being able to produce a rich but quiet background for the creations of modern dressmakers and beauty experts that supplies the name. M. Le Corbusier's name was execrated by all sections of the meeting.

AN "ISLE OF DOCKS"?

What I recently described as "the crying need of making a short cut across the horseshoe bend of the Thames round the Isle of Dogs" is the subject of an interesting scheme outlined in *Modern Building Construction*. Mr. H. Braggs, its author, proposes the excavation of a new, and much shorter, channel between Bugsby's Reach and the Lower Pool, eliminating this so-called island, and coinciding for half its length with the northernmost of the three West India Docks. This would make the whole of the Isle of Dogs, the old river bed round it, and the Blackwall peninsula, available as a new dock area. On this site he suggests that the P.L.A. should construct seven new docks connected with the Surrey Commercial Docks, six of which would be parallel with the new south bank. These docks would be 200 yards apart, up to 1,100 yards in length, and 200 yards in width. They would be flanked by three-storied concrete warehouses, 60 ft. in height, with three basement stories extending under the wharf quays. The 200 yards intervals between the docks would be occupied by double rows of model dwellings for stevedores and other dock workers, with gardens and playing-grounds between. There would be no access to these from the roads bordering the land side of the warehouses, though they would be served by their own domestic roadways. Such buildings as it would be necessary to demolish would be well lost to town planning and better housing.

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The scheme sounds perfectly feasible and, even from the purely utilitarian point of view, eminently desirable. But what about the Blackwall Tunnel? Mr. Braggs's plan shows the new docks running across almost the entire extent of Tunnel Avenue up to the Woolwich Road. This would mean protracting the tunnel to nearly four times its present length, which would be intolerable; or else abandoning it. Then, too, there would be the loss of that modest, unexpected little public garden at the tip of the U-shaped bend, with its wonderful view of shipping in the fairway. And where would London's main sewage pumping station be moved to?

"FARTHING DIPS" (ELECTRIC STYLE)

The electrification of rural districts on parts of the Continent is far in advance of this country, but its results do not always bear out the high-sounding prognostications of progressive politicians. I was lately staying in a remote village of the Belgian Ardennes, where, walking in the cool of night, I passed the open doors of many cottages. The simple interiors were dimly illumined by the feeble rays of what I took for common candles, but what, to my great surprise, proved to be electric lamps of infinitesimal (and therefore economical) candle-power, accurately adjusted to the needs of a thrifty peasantry. No more miserable or harmful form of lighting could be conceived than these half-measures, the dim reflections of such high hopes; and to achieve so much a thousand concrete standards stalked grimly over some of the loveliest open spaces of a beautiful country!

"SMOKING" NOT ALLOWED

A smokeless fuel is even now only in the experimental stage. Mr. Lansbury has sanctioned its use in the Admiralty and War Office buildings, as a trial. I hope it will be successful, and that the two departments concerned will not be frozen out: a consummation not yet to be wished. The less smoke, the less repair to Whitehall buildings, and Mr. Lansbury may live to recoup on the roundabout departments what he has spent on the swings.

A COMMON CULTURAL PURPOSE?

I can never resist the temptation of visiting the annual exhibition of the London Group, whose members always seem to display so much intellectual energy, but with what object it would not be easy to say. Occasionally the catalogue has been prefaced by an explanatory memorandum in which some distinguished person has sought to introduce the exhibits to the public and inform it of the cultural purpose which the painters have in common. It must be confessed, however, that these prefaces have generally had the character of a brilliant *tour de force*, and have displayed the verbal dexterity of the author rather than his persuasive powers. For I defy anyone to explain either in one hundred or one hundred thousand words what is the common cultural purpose of the London Group. And it would appear that the promoters of this year's exhibition realize that the works of painting and sculpture here shown do not express a common artistic outlook but are utterly heterogeneous; and so they have wisely omitted the preface to the catalogue.

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An architect need not be ashamed of trying to find an architectural reference even in an exhibition of paintings. So I need make no apology for having stared, not rudely, I hope, at some of the pictures which seemed on first sight to have something to do with architecture. For instance, I could not help looking at a remarkable composition entitled "Northern Adventure" by Mr. Paul Nash. This is highly priced and is given a position of honour at the centre of an end wall, so I may assume that it is held to be of much account by the members of the London Group. Here is an architectural subject, but the meaning of it is quite obscure to me. In the foreground of the picture is some kind of scaffolding with ladders placed in position apparently to enable a person or persons unknown to ascend the said scaffolding for some purpose or purposes unknown, while at the rear of the scaffolding, at a distance indeterminate, is what appears to be a building which, however, is entirely nondescript, except that it has one rectangular window set conspicuously askew. The exhibition of the London Group is well attended. I feel sure, however, that its promoters could make its financial

success still greater if the visitors might, for a monetary consideration, be allowed to catechize the artists. I myself would gladly pay ten guineas for the privilege of subjecting Mr. Paul Nash to a public cross-examination on the meaning of his picture entitled "Northern Adventure."

PARKING CARS IN THE AIR

A new form of lock-up garage is upon us. It is known as a parking tower and is of a construction at once most simple and devastatingly logical. Two cars deep and, say, five cars high, it operates on the principle of the Blackpool wheel. By pressing a button, any one of the ten cars revolves into position at ground level, being kept righted as it passes over the top by an ingenious piece of mechanism. The makers state, with childlike irresponsibility, that the tower is built of concrete, and may be either simple, or of "*elaborately attractive design.*" There!

WATERLOO BRIDGE TO BE WIDENED

At the time of going to press I had not heard the decision of the L.C.C. with regard to Waterloo Bridge. It was anticipated that there would be no opposition to the recommendation of the Improvements Committee that the bridge should be reconditioned and widened to the extent recommended by the Royal Commission on Cross River Traffic in London. Architecturally, the only difficulty is to decide the exact outline which the bridge would present when widened to thirty-five feet. This problem, I am glad to learn, will be solved by the Royal Fine Art Commission.

BILLPOSTING UNDER A BLIGHT

When I read that the Derbyshire County Council has successfully prosecuted in three cases of summons for exhibiting advertisements that disfigure the countryside, I feel that perhaps the education of public taste is not so painful and laborious a method after all. One of the defendants, who represented a billposting company, contended that the hoarding did not interfere with the view, and that his company tried *as far as was possible* to avoid interfering with the amenities. He suggested that the court should see the hoarding. Unfortunately for him, the court accepted his suggestion, and, on resuming, gave their verdict in the strongest possible terms. These summonses are indications of a campaign by this county council against rural disfigurement, which, if pushed with vigour, will quite soon make this obnoxious form of publicity bad business. Billposting by the roadside is a doubtfully profitable method of advertising in any case; so that if, before erecting a hoarding at some expense, billposters have to reckon with a possible fine and the enforced removal of their hoarding, their business is likely to become so little profitable as to be not worth doing.

EUCLID IN IRELAND

I see that an Irish Board of Guardians, who have decided to build a new workhouse, have resolved: (1) That a new workhouse be built; (2) that the new workhouse be built on the site of the old one; (3) that the old workhouse be not pulled down until the new one is put up.

ASTRAGAL



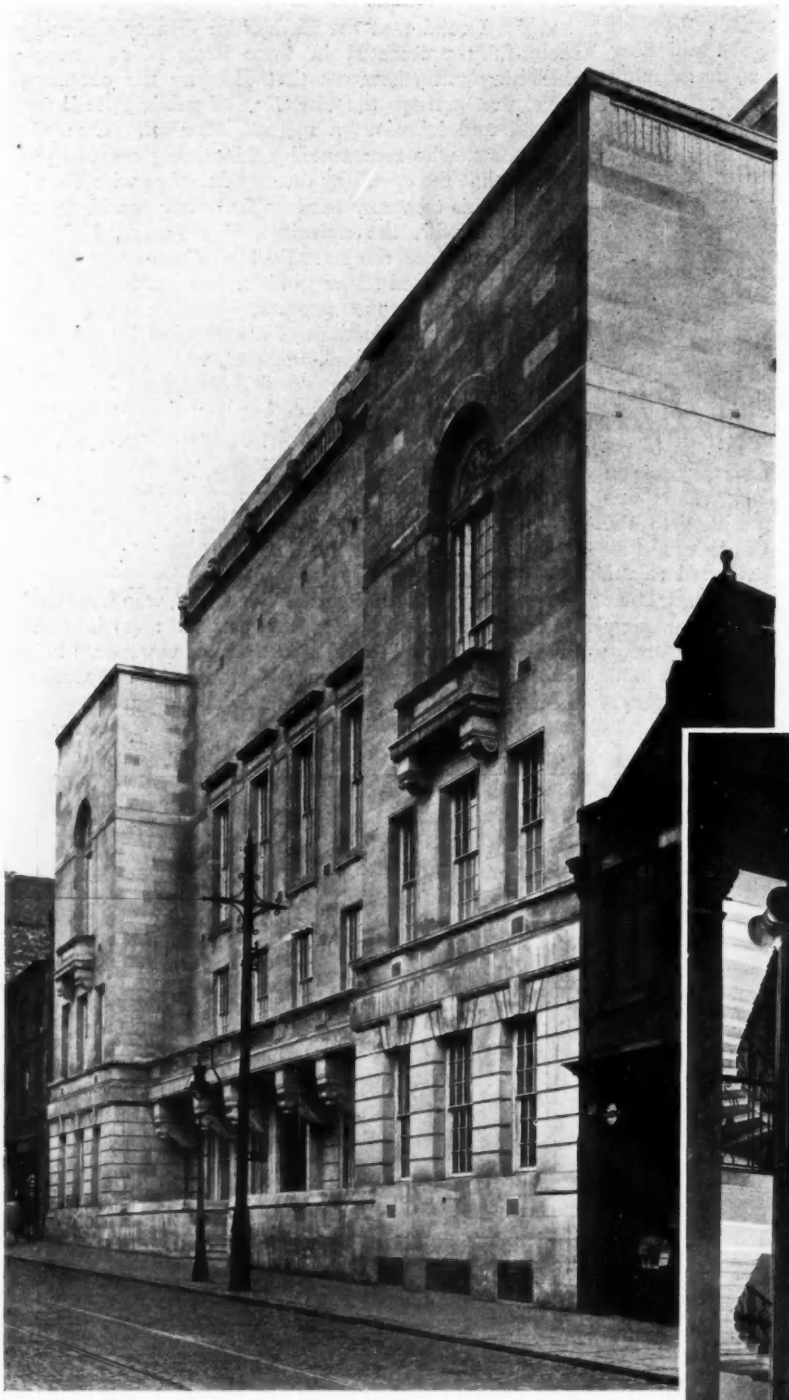
Composed for the camera: "Spring," a photographic study by J. Vanderpant, F.R.P.S., reproduced from "The Year's Photography," the pictorial record of the Royal Photographic Society's activities.

EAST LANCASHIRE'S

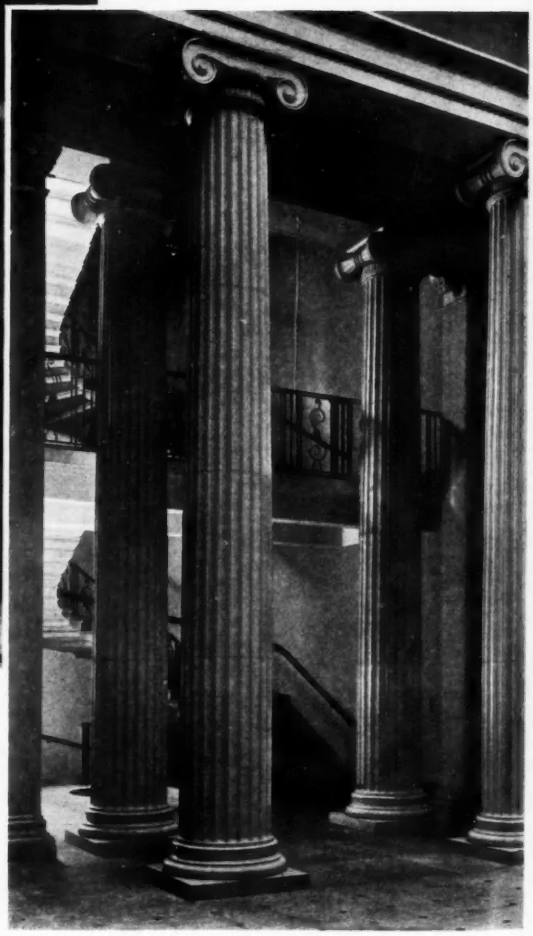
DESIGNED BY THOMAS

THE new Masonic Temple at Manchester, erected by the East Lancashire Masonic Benevolent Institution, serves two purposes. It provides accommodation for the meetings of various lodges of the Province of East Lancashire, of which Lord Derby is Provincial Grand Master, and forms a home for the Masonic Club. The design was awarded first place in a limited competition held in 1923, and the building was completed for occupation in July of this year, though the formal dedication takes place by the Prince of Wales on October 24. The details throughout the building have been very carefully considered, and have entailed the preparation of over 500 working drawings.

The entrance hall gives on the central hall, which has been erected in memory of the Freemasons of East



The main front of the Masonic Temple, Manchester, to be dedicated by the Prince of Wales tomorrow. It is probably the most important Masonic building so far erected in this country. The building on the right will be pulled down shortly and the space used as a car park. The main front is in Portland stone and is crowned by a rich carved band instead of a cornice.



The main staircase, looking from the memorial hall between the pillars in the aisle. Although in close proximity, the staircase does not intrude upon the solemnity, or shape, of the hall.

MASONIC TEMPLE

WORTHINGTON AND SONS

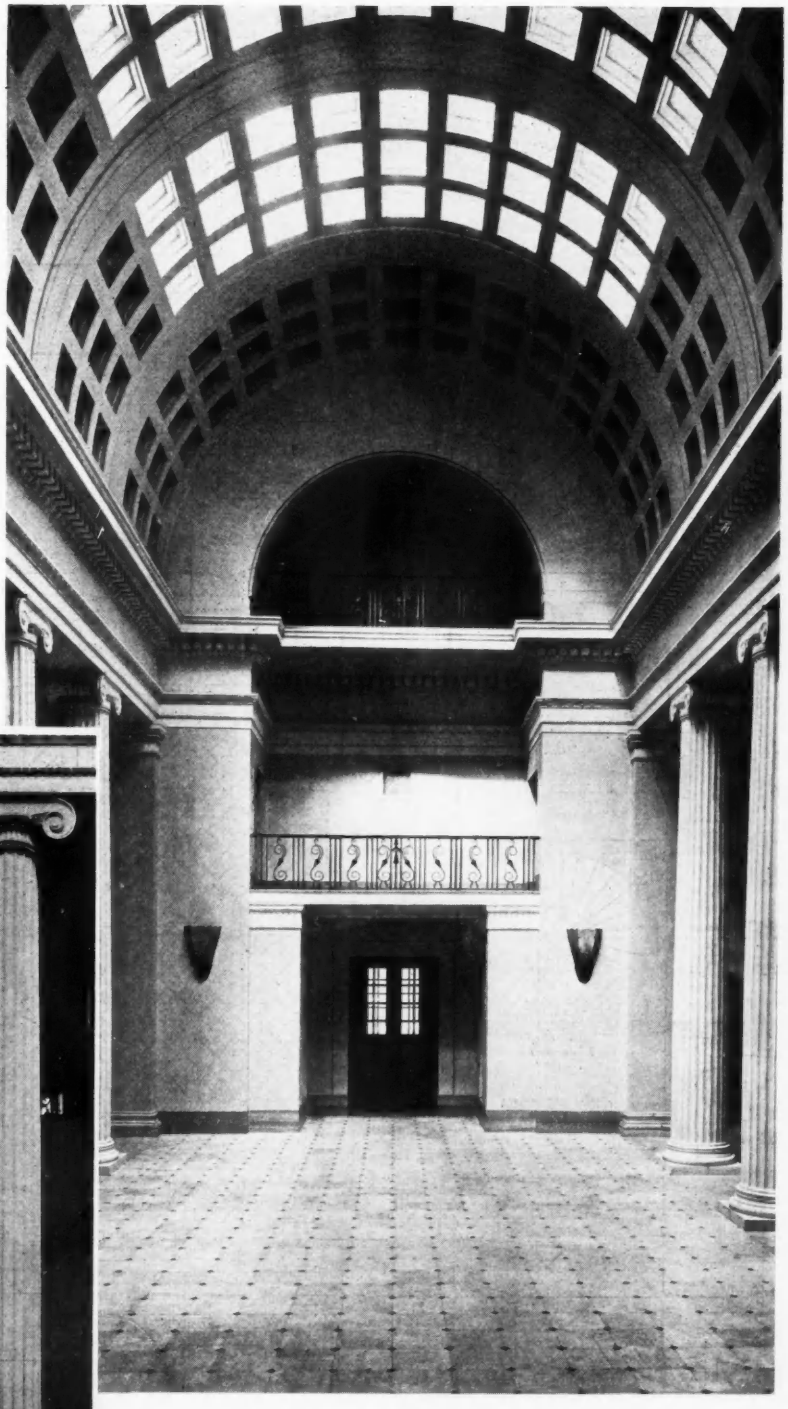
Lancashire who fell in the war. The dedication on the memorial, on the west side of the central hall, records that " This hall enshrines the memory of all Freemasons from the Province of East Lancashire who of their faith and valour made the supreme sacrifice for King and Country during the years of War, 1914–18."

All the lodge rooms have enriched ceilings, and the walls are lined with panelling, that in the principal ground floor, or Derby Lodge, being of Italian walnut with fine veneered panels. The panelling of the other lodge rooms is of oak, some bleached to a grey colour, and some darkened to a rich brown.

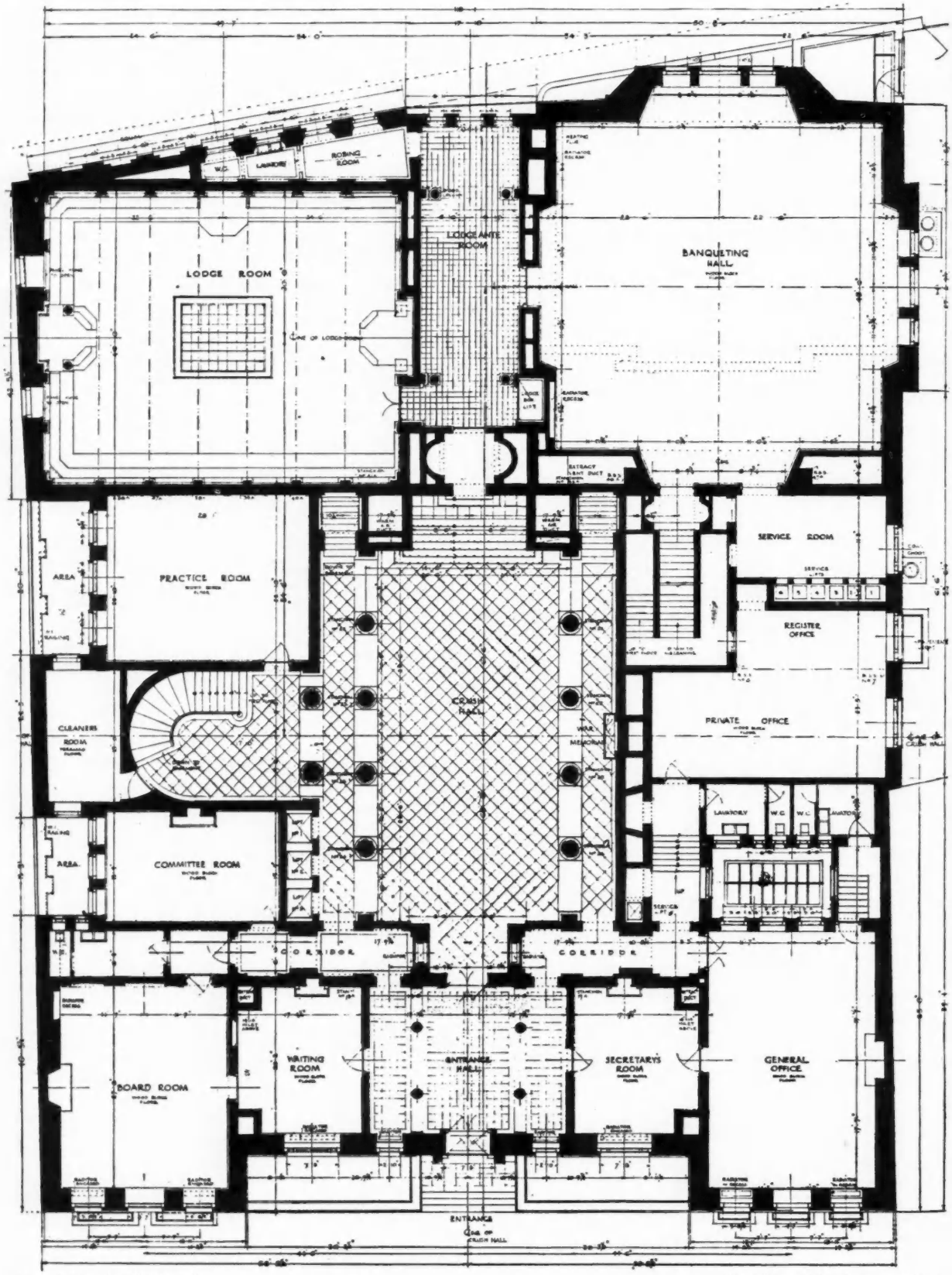
The interior decoration and fittings have been designed by the architects, who have had the assistance of craftsmen in masonry, joinery, and carving, metal, marble, and plasterwork, etc.



The war memorial is on the west side of the memorial hall. The dedication records that the hall has been erected to the memory of the Freemasons of East Lancashire who fell in the great war.

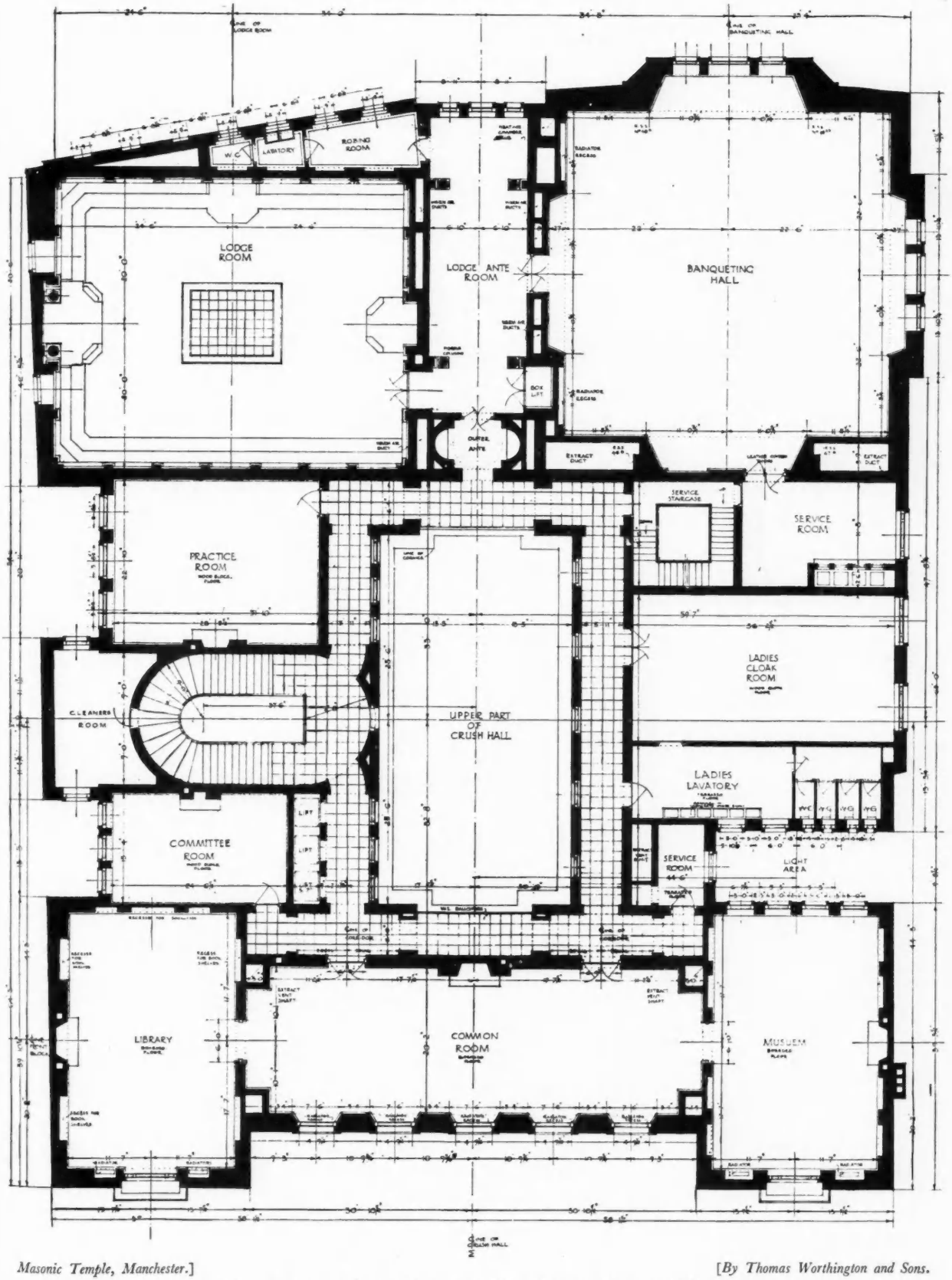


The memorial hall, looking towards the entrance hall. The walls are a soft grey, the skirting is a rich green, the eschaillon columns are ivory, the lamps have bronze pelican supports, and the coat of arms is blue and silver. There are arched recesses at either end of the hall. Steps at its other end lead to the ante room to the Derby—the principal—Lodge, and its banqueting hall.



Masonic Temple, Manchester.] [*By Thomas Worthington and Sons.*

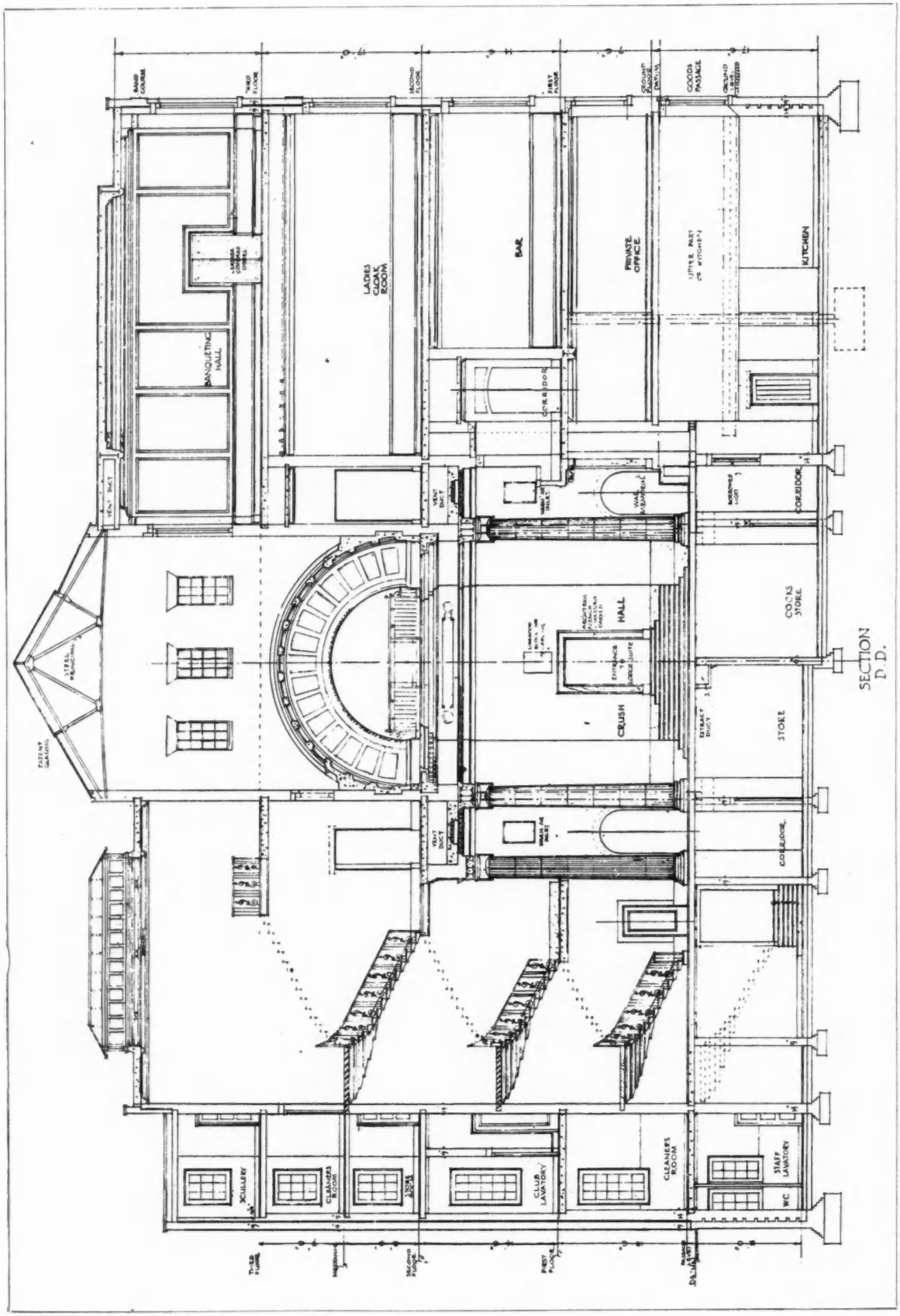
Ground-floor plan. The design of the Temple was selected in a limited competition held in 1923. Professor C. H. Reilly, the assessor, congratulated the Freemasons of East Lancashire on obtaining from the competition so excellent a design. He said: "It is a design far in advance of any I have seen in this country for a similar purpose."



Masonic Temple, Manchester.] [*By Thomas Worthington and Sons.*

Second-floor plan. The club rooms are on the first floor, overlooking the main front to Bridge Street, minor rooms being placed on the flanks. On the second floor, the plan of which is shown, is another and similar suite of rooms for the use of Freemasons who are not members of the club, and for general entertainment.

C



[By Thomas Worthington and Sons.

Masonic Temple, Manchester.]

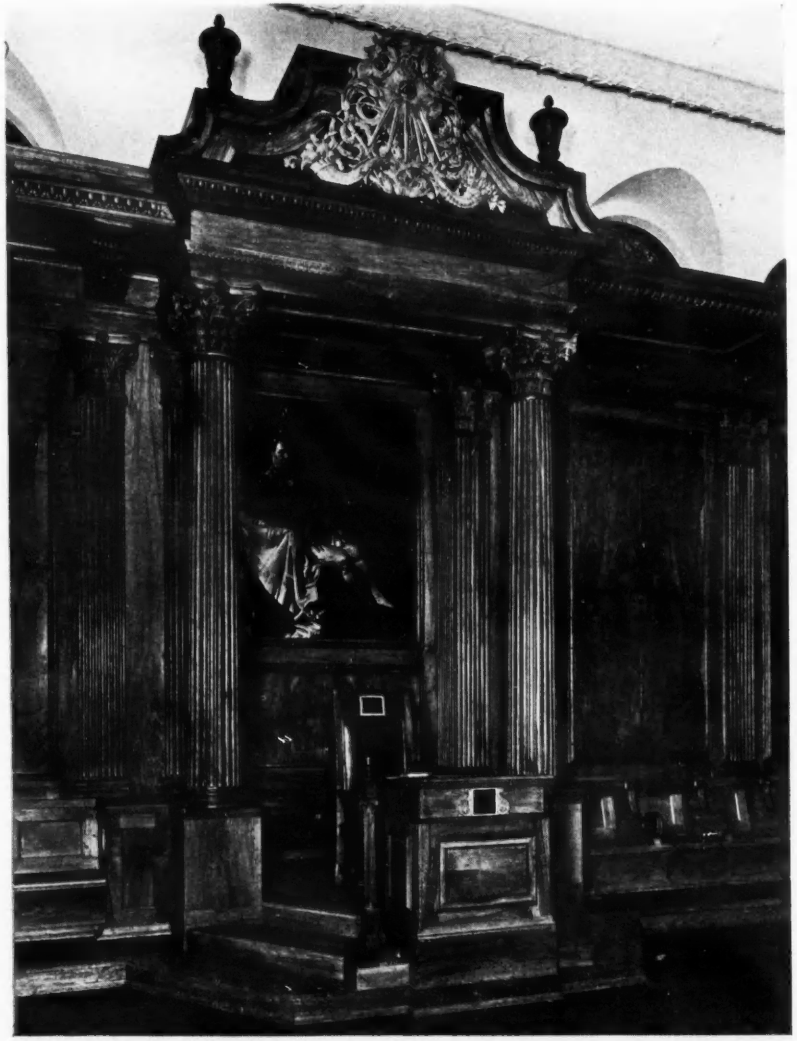
The cross-section shows how the main staircase has been designed so as not to encroach upon the shape or solemnity of the crush, or memorial, hall. The latter extends to the height of three floors, and is lined on each side with polished French limestone columns surmounted by entablature and cornice, and roofed with a Roman coffered barrel vault.

The cross-section shows how the main staircase has been designed so as not to encroach upon the shape or solemnity of the crush, or memorial, hall. The latter extends to the height of three floors, and is lined on each side with polished French limestone columns surmounted by entablature and cornice, and roofed with a Roman coffered barrel vault.



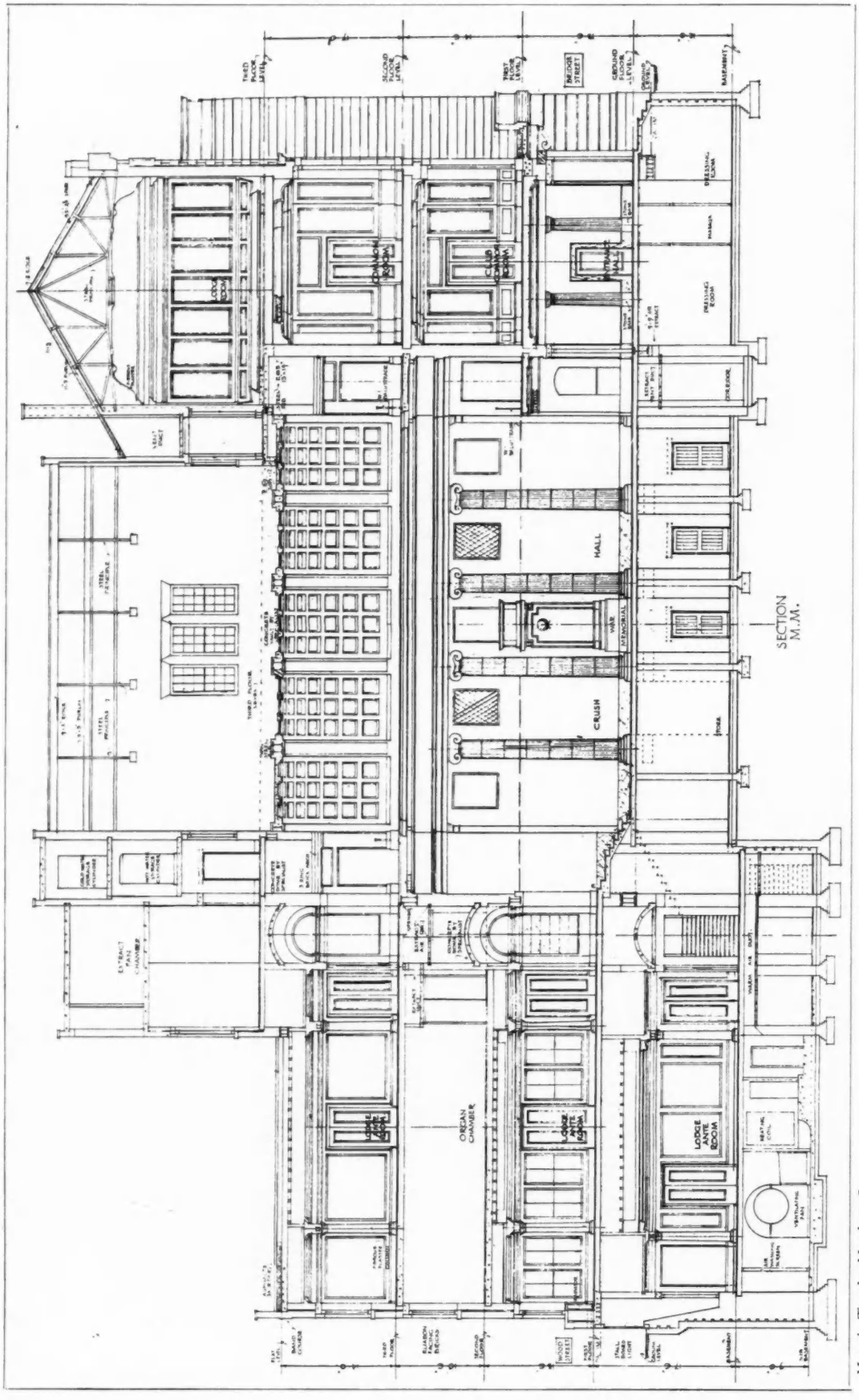
Masonic Temple, Manchester.]

The common room, looking towards the museum. As will be seen from the plan on page 599, the common room is flanked on one side by the museum and on the other by the library. These three apartments extend the full width of the main front.



[By Thomas Worthington and Sons.

The Provincial Grandmaster's dais in the Derby—the principal—Lodge on the ground floor, with portrait of Lord Derby by Sir William Orpen. The main lodge rooms are panelled in Italian walnut, the panels being of fine veneer.



Masonic Temple, Manchester.] [*By Thomas Worthington and Sons.*

Longitudinal section. The lodge rooms, banqueting halls, ante-rooms and robing rooms are planned in the quietest parts of the building. On the main front to Bridge Street are the board room, waiting room, secretary's room, and general office. Above are the library, museum, common, and other rooms,



The banqueting hall of the Derby Lodge suite, looking towards the service room. All the banqueting halls are large in area, and are plaster panelled with enriched ceilings. They are placed one above the other, and enable the service from the kitchen to be easy and efficient.



Masonic Temple, Manchester.] [*By Thomas Worthington and Sons.*

One of the kitchens in the basement. Admirable means are provided for receiving and checking goods, and there is plenty of storage space. To each banqueting hall is attached a service room connected by lifts with the kitchens.



The exterior, showing stairways ascending right and left to an open terrace, which can be utilized for outdoor meetings; three round arched openings below give access to the boys' rooms. Prismatic electric lights have been let into the dwarf walls to light the steps; they also give a soft glow to the façade.

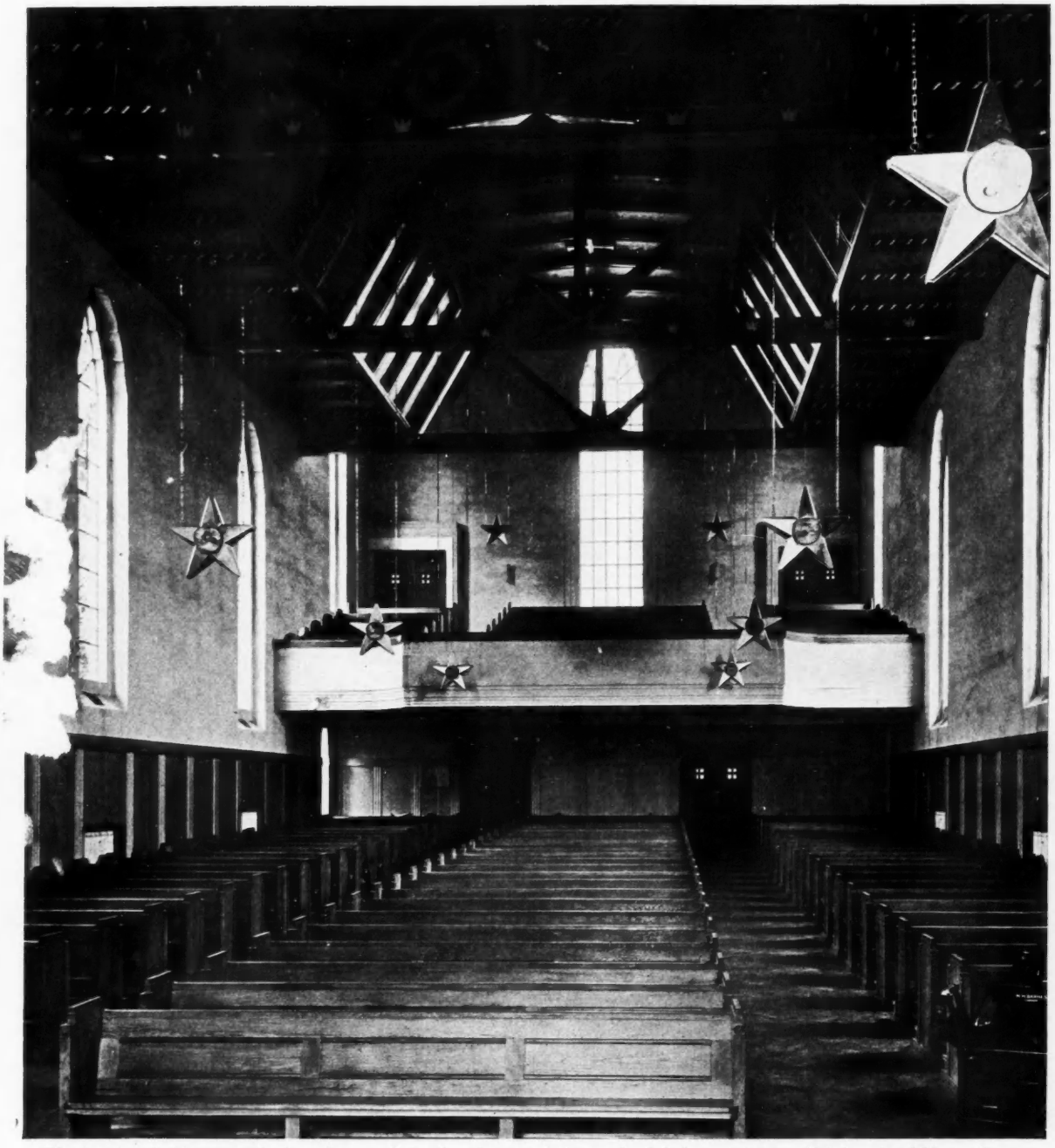
THE FIRST CLUBLAND

DESIGNED BY

IN a busy thoroughfare in one of the most densely populated quarters of South London, in less than a year, has sprung up this novel building, the First Clubland Church. The whole conception of combining club and church originated in the mind of the minister, Mr. Butterworth, and it has been made a practical reality through the sympathetic treatment of its architect, Mr. Edward Maufe.

Mr. Maufe was asked to provide "a bold relief from the sordidness around . . . a revolt against the gaudy, flashy, and cheap on the one hand, and the austere and harsh on the other." His conception is original and in many ways unique: he has succeeded in producing a building admirably suited for its purpose; a building which is a direct negation of the universal idea that "anything will do" where dismal and unlovely surroundings are concerned.

Erected to be a social as well as a religious centre, the building comprises a church and, in addition, men's, women's, boys' and girls' club-rooms, all under one roof. The church consists of a nave of four bays without aisles,



The interior, looking towards the gallery, and showing the open timber roof, of tie-beam pattern, which is painted blue and green, with gold stars and other decorations. The floor is raked, and the gallery, which projects a fourth into the interior, is stepped. The pews are of natural oak and wax polished.

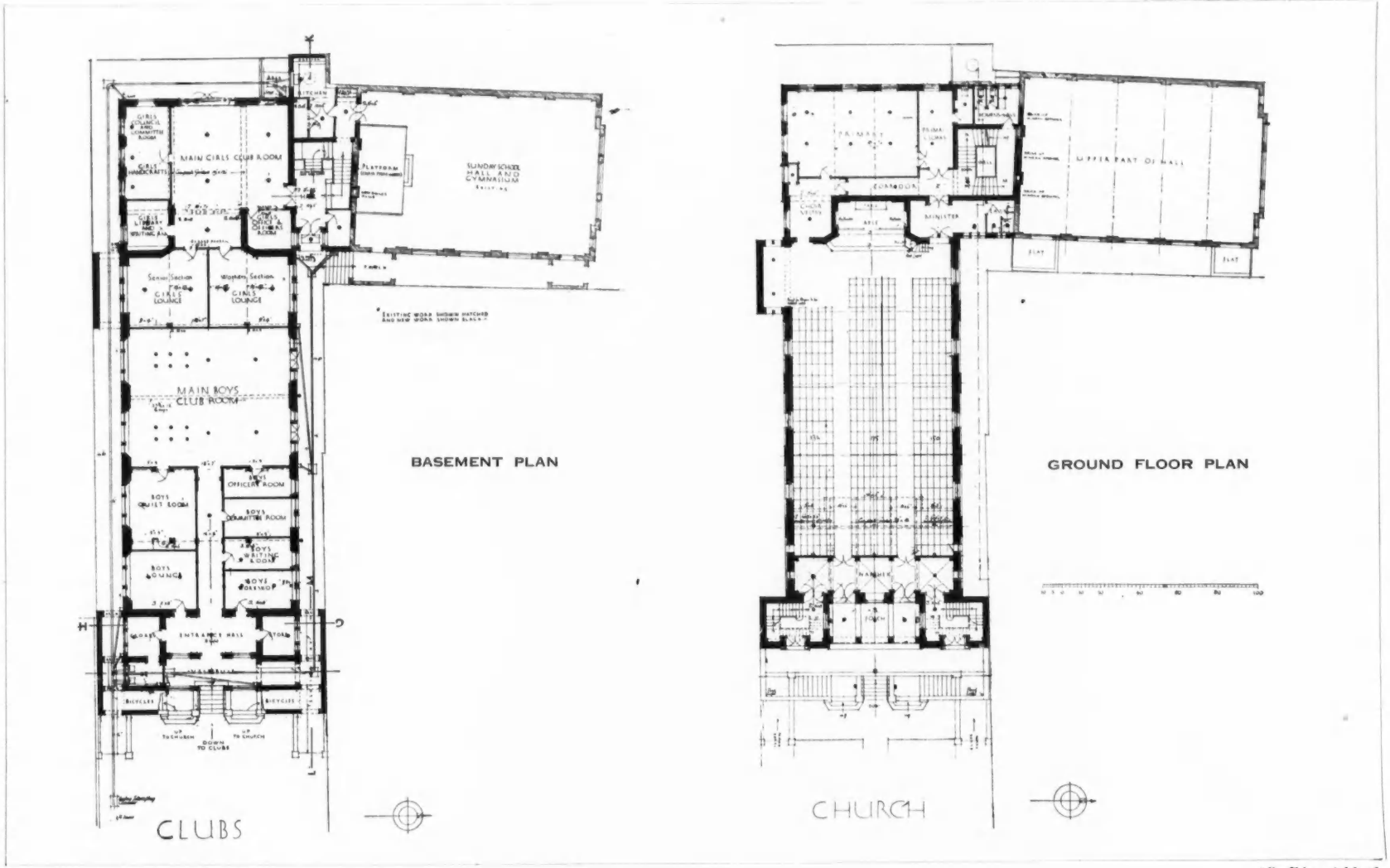
CHURCH: WALWORTH, S.E.

EDWARD MAUFE

a broad low-gabled western tower, containing a gallery and short apse, with the boys' and girls' clubs in the basement. The men's and women's rooms are beyond the apse and linked at right angles with the old chapel now used as a lecture hall.

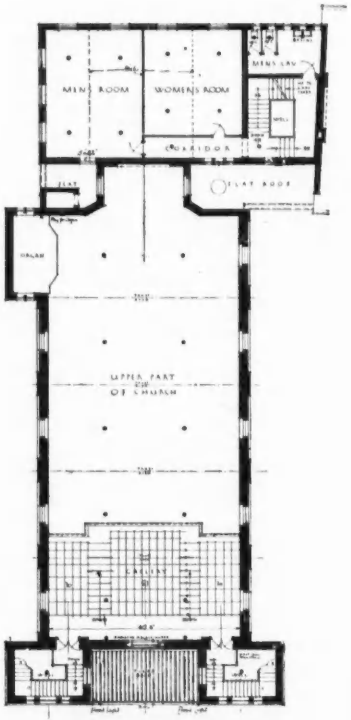
The total length of the church from the back of the gallery to the apse is 100 ft., and the width is 41 ft. It will seat over 600 people. The body of the church is approached from the portico, through what is a particularly interesting feature—the vaulted narthex.

The architect, whilst avoiding positive symbols, has succeeded singularly well with the interior colour decoration, and several modern ideas in electric lighting have been introduced here for the first time. The main lighting of the church consists of hanging reflectors fitted in gilded wood stars, so arranged that all the light is thrown forward and no light is in the eyes of the congregation. The backs of the reflectors are also gilded, which results in a golden light, and the tall windows are glazed in a tint which gives a mellow glow. Tubular lights have been used



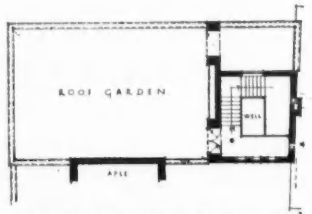
The First Clubland Church, Walworth.] [*By Edward Maufe.*

Plans of basement and ground floor. In the basement are the girls' and boys' clubrooms, libraries, lounge, writing rooms, workshops, chapel, etc. The old hall in the rear is now used as a Sunday school and gymnasium. The church is on the ground floor, with minister's room, cloakrooms, etc., in the rear.

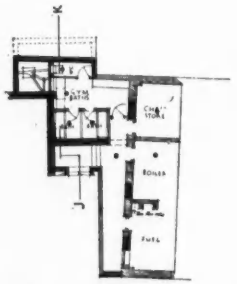


FIRST-FLOOR PLAN





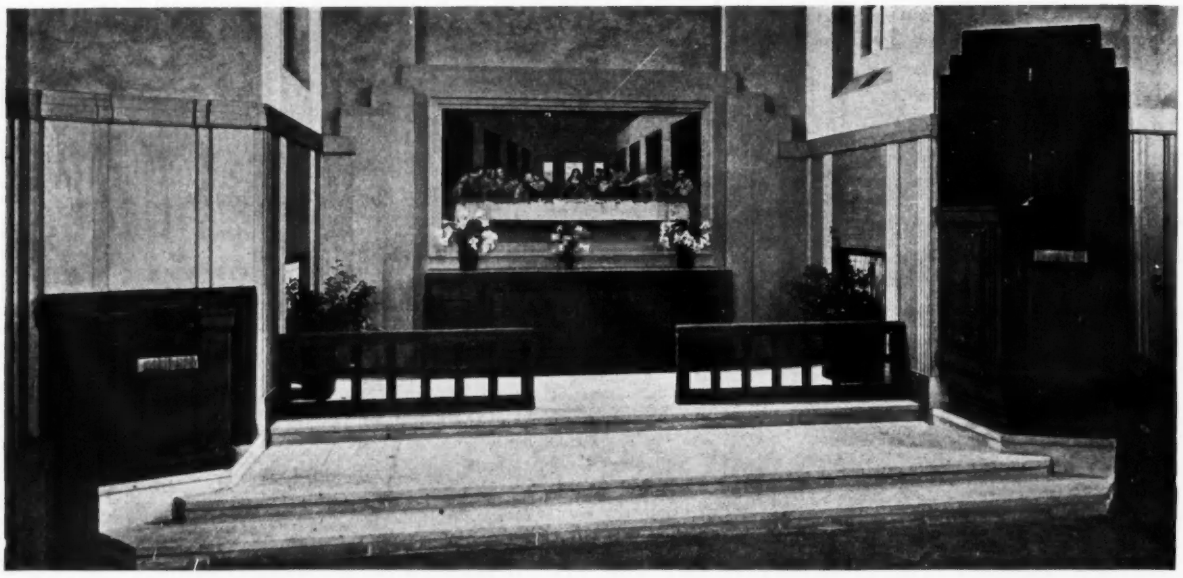
PLAN OF ROOF GARDEN ABOVE MEN'S AND WOMEN'S ROOM



PLAN OF SUB-BASEMENT

The First Clubland Church, Walworth.] [*By Edward Maufe.*

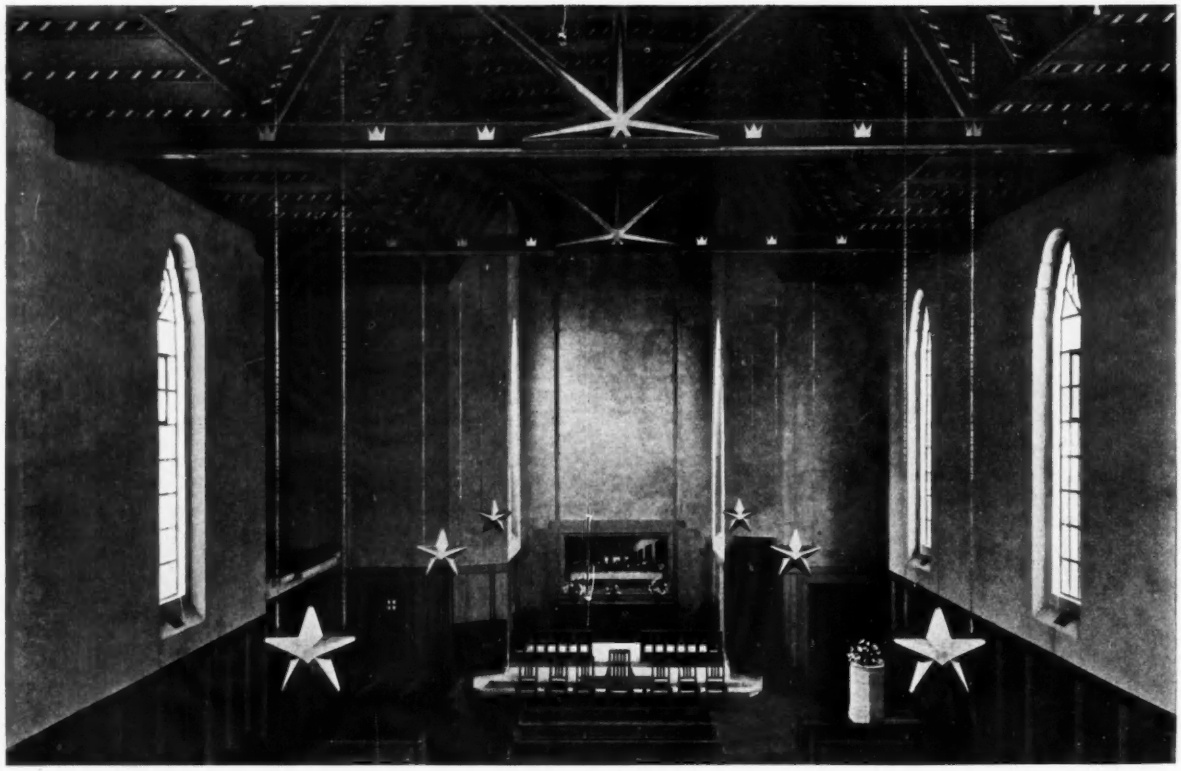
Plans of sub-basement, first floor, and roof garden; and photograph of the terrace. The photograph shows on the extreme left one of the entrances to the gallery, which, like its counterpart on the right, is enclosed in a projecting pavilion with pyramid tiled roof, and possesses a carved keystone. The pavilions are linked by an open portico with a penthouse roof of tiles, divided into three portions by stone columns, with finely carved capitals, shown in the foreground of the picture.



A near view of the apse, which has windows of the same design as those in the nave. Over the communion table is a copy of an Italian painting of "The Last Supper." Flame-coloured floodlights are let into the sides of the apse.

in a very effective way in the portico, narthex, and gallery staircases, those in the narthex being particularly interesting, as they are arranged crossways in the vaults so that the result gives the effect of lighted crosses in the sky.

The walls are acoustic-plastered in a warm buff colour, the lower part being panelled in three-ply with flute designs, and painted in a mixture of silver and gold which gives a surface resistant to markings. The surface of the external walls has a fine texture, the facing material being a hard-faced Ruabon brick of a warm lavender-grey, with dressings of Portland stone. The club-rooms are furnished in natural oak with brightly coloured walls.



The First Clubland Church, Walworth.] [*By Edward Maufe.*

A view looking from the gallery. Above the communion table the end wall rises in a tall, shallow, arched recess; on this a gold cross has now been hung. The font on the right is of a simple design, in Portland stone, seven-sided, with waved water lines. The space on the left will eventually accommodate an organ.



ENGLISH PRECEDENT No. 87

HOUSES,
ST. MARGARET STREET,
ROCHESTER

Though nowadays the noise of traffic is made nearly unendurable by reason of the friendly spirit that allowed this house to be built close to the street, by setting our building lines back we shall miss the finer interrelationship of streets with boundary walls. The feeling for surface gives charm in this instance and fills blank walls with patterns.

—[E. MAXWELL FRY.]

THE HONEYWOOD FILE

BY KARSHISH

XXIV: Lady Brash Causes a Diversion

The interior finishings are going on. Sir Leslie Brash has got to loggerheads with his architect, James Spinlove, over the decorations to the bedrooms upon which Brash is taking the advice of a friend who is commercially interested in a "new novelty super-paint"; Grigblay, the builder, has disclaimed all responsibility for using it.

SPINLOVE TO GRIGBLAY

Dear Sir, 10/11/25

I had to call your foreman's attention to boarding on flats over bays, which is specified to run with the fall, but has been laid across it to suit the joists which run the wrong way. I must ask you to nail $\frac{5}{8}$-in. boarding over present boarding, with feather-edged border so as to get neat finish of lead on to brick cornice. [*Boards are apt to curl up at edges under lead, and prevent free drainage of water if laid across the fall.*]

The trefoil piercings in skirtings of panelled rooms have been omitted. This makes the broken battening and openings in top of capping useless. Please put stout cop-bronze wire mesh behind piercings. [*The purpose of this arrangement is to give free ventilation behind the panelling, for if air is bottled up between panelling and damp walls, the warmth of the house will favour dry rot. The wire gauze is against mice.*]

The eaves gutter at N. of kitchen wing stops short of the gable verge. I am aware that the verge is tilted, but the finish is unworkmanlike. The stopped end should be 1 in. in front of line of verge. [*The tilting of the tiles at gable verge throws the water back, so that the eaves gutter probably is effective in catching all of it. It is the rigid exactness of modern building that makes this immaterial deviation an offence.*]

Now that the heating service is working, will you please see that the windows are *kept open*. I have called your foreman's attention to this before. [*The heating is kept on to help dry out the house, but if the windows are kept shut the steam-laden air, which can take up no more moisture, cannot escape; condensation takes place, and the object of having the heat on is in great part stultified. The windows are kept shut because of the blinking draught, and in pursuit of snug comfort. Even at the best of times the luxury of shutting oneself up for a day with a mate and a radiator in an unventilated bathroom, with a few cans of paint, a plumber's furnace, two clay pipes, a quart of boiling tea and a pound of putty, is rarely enjoyed.*]

The lead tacks of soil pipes, as well as of waste pipes, are to be wiped on the front angle. This has not been done. The service pipes carrying taps are to be *vertical*. The double tacks above and below taps are as specified, but in the pantry the pipes are *horizontal*. They must be carried along under sink, and then taken up vertically to match scullery taps.

[*The nozzle of a tap fixed in a horizontal pipe tends to sag down after a time. A vertical pipe, properly fixed, resists the leverage of the hand screwing down the tap.*]

Please give these matters your attention.

Yours faithfully,

Spinlove has been away from the works for some weeks, and if these are the only matters he has to complain of, Grigblay is doing well.

SPINLOVE TO GRIGBLAY

Dear Sir, 15/11/25

Sir Leslie Brash rang me up today to tell me Lady Brash is complaining of a *smell* in the house. Will you find out what is the matter? I could get no description of it, except that it is an unpleasant smell.

Yours faithfully,

Most of them are so or they would not be smells; and it is difficult to describe a smell, even when it will bear description, which is rare. Lady Brash's famous "olfactory sensitiveness" has claimed tribute.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 17/11/25

Would it be practicably feasible to insert French windows in the drawing-room, and what would be the amount of the probable anticipated estimate? A friend has pointed out that it will not be practicably possible for a person seated in the middle of the drawing-room to get a view of the gardens, owing to the excessive height of the bottoms of the windows? This is disturbing. Alternatively, and as a different proposition, could not the windows be lowered a foot or two? What would be the probably approximate estimate for doing so, including, of course, the bay windows? I comprehend the necessary desirability of disposing the windows of the bedroom chambers in a lofty situation in view of the danger of a fall, but this desirability scarcely obtains in the downstair apartments.

Lady Brash informs me the smell is much worse. It is desired that the necessary steps towards eradication may be *at once* put in active operation, as Lady Brash spends several hours of each day in the house.

Yours sincerely,

SPINLOVE TO GRIGBLAY

Dear Sir, 19/11/25

Have you done anything about the *smell*? Sir Leslie Brash referred to it again in a letter I received on Saturday, and he has rung up today to say that Lady Brash was in the house on Sunday and that the smell was "dreadful." Please take steps to have the nuisance ended at once, as it is causing great annoyance. I wish you had not allowed the plumbers to use the den as a shop. They have made the place in a disgusting state—litter of all kinds, bacon rind, banana peel thrown about, crusts and bones and tea leaves—your foreman ought to be told to look after things better.

Yours faithfully,

Spinlove is evidently getting rattled, but until Lady Brash is appeased there will be no peace for anyone.

LADY BRASH TO SPINLOVE

Dear Mr. Spinlove, 19/11/25

I really think I ought to write to you about the smell! It was *quite* dreadful on Sunday they all noticed it and Mrs. Bingham said it made her eyes water she is so subject to hay fever like my dear mother was and I take after them BOTH!!! I could never consent to live in a house with a smell like that which goes on and on even after I get home like the monkey house in the Zoo especially the drawing-room. Whatever Sir Leslie may say something will have to be done or none of our friends will ever come to see us!!!

How fast the leaves are falling!

Yours v. sincerely,

SPINLOVE TO LADY BRASH

Dear Lady Brash, 20/11/25

I do not know what the particular smell is that you do not like. I have asked Mr. Grigblay to try and find out. Of course, many of the materials used by the workmen have strange smells, but that is unavoidable and they will all disappear, I can assure you, before the work is finished. If you find the atmosphere of the house so unpleasant, it would perhaps be wiser *not to go into it* just at present; or why not ask Mr. Bloggs to *open the windows*; have you thought of that, I wonder?

Yes, I noticed the leaves were falling.

Yours sincerely,

Spinlove's solicitude leads him to ascribe to the lady a degree of imbecility which is scarcely flattering.

GRIGBLAY TO SPINLOVE

Dear Sir, 20/11/25

We have noted the various instructions you gave our foreman, which are receiving attention. He has searched for the smell complained of, but has not succeeded in discovering it. His report is as follows:—

"About her Ladyship's smell there is not anything to complain about as I can see. The paint is nothing at all

scarcely. There was a bit of a hum in the kitchen, but that was just a coat the gas-fitter's mate had there. He said it was fish, and I reckon like enough it was. I told him take it outside. The plumber's shop is swept out."

We do not know what more we can do in the matter.

Yours faithfully,

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 21/11/25

I have twice written to Grigblay about the unpleasant smell, and I have today heard from him that they cannot detect anything which is not as it should be. In writing to Lady Brash yesterday, I suggested that she might perhaps see that the windows are opened.

In answer to your question, French windows are impossible. They could not be fitted to the existing openings; could not be made to match the other windows; and would be disastrous architecturally, as you would at once realize if I made you a sketch of the altered elevation. If you had said originally that you wanted French windows, I could have designed them suitably, but the style of the house would have been entirely different.

It would be possible to lower the windows, but if you did so the transom —that is, the intermediate horizontal member of the frame—would come right across the line of vision of anyone standing. The top of cills is 2 ft. 9½ ins. from the floor, and this is as low as can be managed. I may point out to you that the reason you cannot see the garden outside when seated away from the window is that the ground slopes away. In any case, the top of the terrace wall will appear above the line of the window cill to anyone seated in the room, so that even if you lowered the windows you would have no better view of the garden.

I had intended to suggest to you, when the subject was allowed to drop, that instead of painting the doors pink, yellow, blue—for I am sure you would dislike the array of differently-coloured doors—the names "Pink Room," "Yellow Room," etc., might be lettered on each door. I could design a scutcheon upon which the words might appear, and this might be of the appropriate colour if you wish—or the coloured scutcheon without the words might serve. Personally, I would recommend the words without the scutcheon.

I hope you will not think me unduly persistent, but I am sure you would regret a parti-coloured corridor.

With kind regards,

Yours sincerely,

Apparently the conversation grew heated when the rainbowed bedroom proposals were discussed, and Spinlove had to change the subject. It is a torturing effort for the designer to get the heads—or transoms—of casement windows above the eye, and the cills duly low, while at the same time keeping the proportions of windows satisfactory.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 22/11/25

I have considered your remarks anent the windows, and suggest you will raise the floor of the room, which will, I apprehend, give the same equivalent effect as the lowering of the windows to which you demur, and prevent the terrace wall obstructing the view. There will be no objection to going up two steps into the drawing-room—in fact, most pleasing effects may be obtained in this manner, and we can postpone using the apartment until the operations are completed. What will the cost of this work be? I recall that £300 is included in the contract amount to meet contingencies of this kind.

I am not at all averse to your proposal for identification of bedroom doors. If you will have a door painted and appropriately lettered as you propose, I will give you an ultimate final decision.

We are contemplating moving into the house for Christmas Day. Do you think that a feasible proposition?

I have seized the opportune occasion to purchase certain cottages, and shall not in consequence now find the necessity to erect those conveniences. Will you please advise Messrs. Nibnose and Rasper with the appropriate intimation?

Yours sincerely,

PHYLLIS BRASH TO SPINLOVE

Dear Jazz, 24/11/25

You ought to hop down as soon as poss. Mum is worrying dreadfully over the smell in the house. She spent most of this morning and part of the afternoon listening for it; it did not squeak today, but was apparently known to be in hiding. I have not been in the house myself on a good hunting morning when the scent was lying well, but two people besides M. found on Sunday, so something must be wrong.

Dad started an innocent little frolic with a dentist ten days ago; it became a serious game, and poor Dad is now nine down with seventeen to play. He is staying up in town till after the final round, which is why I write. Will you 'phone tomorrow, please?

PUD.

SPINLOVE TO GRIGBLAY

Dear Sir, 25/11/25

I am directed by Sir Leslie Brash to say that he does not now intend to build any cottages.

Will you please tell your foreman to see that all windows are securely *shut* before the men leave on Saturday, so that I may satisfy myself about this reported smell.

Yours faithfully,

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 28/11/25

I am sorry to know you are having such a bad time of it.

As you will no doubt have heard, the smell Lady Brash complained of is that of the *new oak*. It is a penetrating smell certainly, but most people like it. It will entirely disappear in a short time; in fact, I do not think it will be noticed after the oak has been waxed.

I am afraid it will not be possible for you to get into the house for Christmas. There is much more to be done than appears. In six weeks' time it might be possible, but it would be better for you to wait. The house is drying out well, and I do not think there would then be any actual objection to its being lived in; but if you waited, say, till March you could be certain of no ill consequences.

As regards raising the floor of the drawing-room, there are grave difficulties and objections which, I think, you have not realized. Ten or twelve inches off the height of the room would make it appear very low. This is a big room and the height to ceiling is no more than is necessary, for it fixes the height of the first floor throughout. To raise the floor would mean raising the panelling to about 18 ins. from the ceiling, which would look very ugly, and also rebuilding the brick chimney, for the opening of the fireplace would be much too low. The transom of the window would also come very awkwardly; persons looking out would have to stoop or stand on tip-toe. It would be dangerous to have the steps close up to the door; a landing outside would be necessary, which would stand out, with the steps, 4 or 5 ft. into the hall, and of course the new floor would have to be carried on joists. The concrete floor is prepared for nailing the floor boards to it, and the only reason this has not been done is that I told Grigblay to hold off so that the concrete should be thoroughly dry. The cost of the alteration, as you may judge, would be a considerable sum —£200 very likely.

The £300 contingencies you mention is not available for extra work of this kind. It is to cover the contract work; that is to say, to pay for work which may be found necessary, but which is not described in the contract because it may not be. Part, at least, of this sum has been spent. If there is any left unexpended, it will of course be credited in the final statement of account.

I have written a tactful letter to Nibnose and Rasper, letting them know

you do not now intend to go on with the cottages. As you remember, they agreed to cancel their previous contract on the understanding they should tender, against Grigblay only, to the new design I was preparing; but I hope they will not make any trouble.

With kind regards,

Yours sincerely,

SPINLOVE TO NIBNOSE AND RASPER

Dear Sirs, 28/11/25

My client desires me to present you with his best compliments and inform you with his profound regrets that he has now decided not to build the cottages for which you were so obliging as to consent to submit a tender.

Sir Leslie Brash asks me to tell you that he looks forward on some future occasion to the pleasure of availing himself of your services.

Yours faithfully,

If this suave and buttery letter is Spinlove's idea of a tactful one, he has much to learn. It not only reeks of insincerity, but is intolerably condescending in tone, and would be likely to give offence to anyone and under any circumstances. "Nibrasp" will perfectly understand that the purpose of it is to disarm their claim to compensation; and as the firm has already, in its own opinion, been unfairly deprived of the contract for the house, anything more provocative and inflaming could scarcely be devised. Spinlove ought to have written somewhat as follows: "An unfortunate thing has happened. My client has an opportunity of buying cottages close at hand, so that there is now no reason for him to build. I am afraid you have been put to a good deal of trouble, and Sir Leslie Brash is sorry for this and will bear it in mind, and hopes to be able to make use of your services on a future occasion."

BRASH TO SPINLOVE

Dear Mr. Spinlove, 29/11/25

I am glad to be in a condition to intimate that I am now emancipated to freedom from the dental surgeon's sanctum—though still unable to make spectacular public appearances.

I am naturally disappointed to be apprised that our occupation of the house at Christmas is not practicably feasible. Christmas Day eventuates precisely fourteen days subsequently to the contract date of completion. I advisedly apprehended that certain extra days would be allowed to Mr. Grigblay to perform his undertaking, but six weeks is surely a very excessive apportionment of latitude. It is, of course, in your hands to see that Mr. Grigblay is kept informed of his obligations, but I desire that you will intimate to him that I consider his procrastination beyond what is reasonably to be anticipated, and that I shall certainly not feel inclined to remit any proportion of the sums which may become due to me as penalties for delay.

I note your remarks anent the lifting of the drawing-room floor. I do not precisely apprehend the full interpretation of your remarks, as I am not in a condition to immediately make the public appearance involved by the journey to the site, but I am prepared to accept your views although they do not favour my ideas, as the amount of the anticipated estimate is altogether more than I can contemplate.

As regards the contingencies, I apprehend that the money is mine, and that I am, therefore, at liberty to spend it if I choose—however, it is not necessary to deviate upon that eventuality. The mansion certainly more than satisfies our anticipations. I look forward shortly to viewing the experimental lettering on doors.

With kind regards,

Yours sincerely,

NIBNOSE AND RASPER TO SPINLOVE

Dear Sir, 29/11/25

We were just a little surprised at your letter—but nothing to worry about—as this is the second time we have been passed over by you, and we are getting used to same.

We shall be glad if you will present our respects to Sir Leslie Brash and inform that gentleman that we shall be glad to serve him at any time that he may honour us with his orders and abide by them; but we do not much care for the way he has served us so far, for what we expected is not *com*pliments but *com*pensation.

We may remind you that when Mr. Nibnose saw you at your office on this matter it was clearly understood that we would agree to cancel our contract if we were given a fair chance to tender to a new design against Mr. Marston Grigblay only. As Sir Leslie has chosen to disregard his side of the bargain and break your word to us, we must respectfully ask for a sum representing our reasonable profits in compensation, viz., 7½ per cent. on the amount of our tender.

Yours faithfully,

"Nibrasp" are entitled to compensation for the cancellation of their contract, since the acceptance of a tender constitutes a contract binding on both parties, each of whom is entitled to compensation for breach by the other. The sum that would be allowed by the Courts in compensation would depend on the circumstances. It might happen that a contractor or a building owner would, by a breach by the other, be involved in losses far in excess of the direct loss of profits or loss of the bargain.

(NEXT WEEK: XXV — WRANGLES AND JANGLES)

THE COST OF HEATING BUILDINGS: ii

BY ALEX. H. HAYES

THE ECONOMIC VALUE OF CONVENIENCE

IMPORTANT though the question of fuel cost must always be in problems of heating, this cost does not represent by any means the only consideration in choosing the most economical and satisfactory type of plant for any particular conditions. Nor are the other factors covered entirely by cost of the initial installation. Although this cost for some types of plant is relatively heavy, when it is taken over the normal period of the life of the installation and distributed as a figure of depreciation and interest on capital invested, the annual charge is usually quite trivial compared to the fuel cost. The other factor of real importance is rather one of personal convenience and utility. Particularly in domestic installations, whether of the local or the central-heating type, the space occupied by the plant, the amount of consistent attention necessitated in operation, the presence of refuse requiring removal, and similar matters, all have a bearing on the value of the system; and although these factors cannot always be assessed in monetary values, they are often dominant considerations in rendering a particular type of installation desirable or otherwise.

For the above reasons there are many conditions under which an expensive process of heating—as by electricity—is actually the most economical, since the comfort and convenience provided may easily be much more than that of a system which is cheaper to operate.

Further, the question of continuous or intermittent operation affects this matter of convenience as well as determining the effective cost of operation. Where a large building is being heated, and firing and attendance on a central-heating boiler can reasonably occupy (perhaps together with other duties) a regular attendant, the persons requiring the facility of heating are not involved in any of the inconvenience of the system's characteristics. When, however, intermittent attention on a small central-heating boiler in a domestic establishment devolves upon one of the domestic staff, the duty is inclined to be arduous and irritating and also disruptive of other duties. The modern tendency in house equipment is to eliminate as far as possible personal labour and attendance which can be substituted by mechanical or automatic means, and when this object is

in view the choice of a system is determined more by the estimated value of the convenience than by the cost of the fuel.

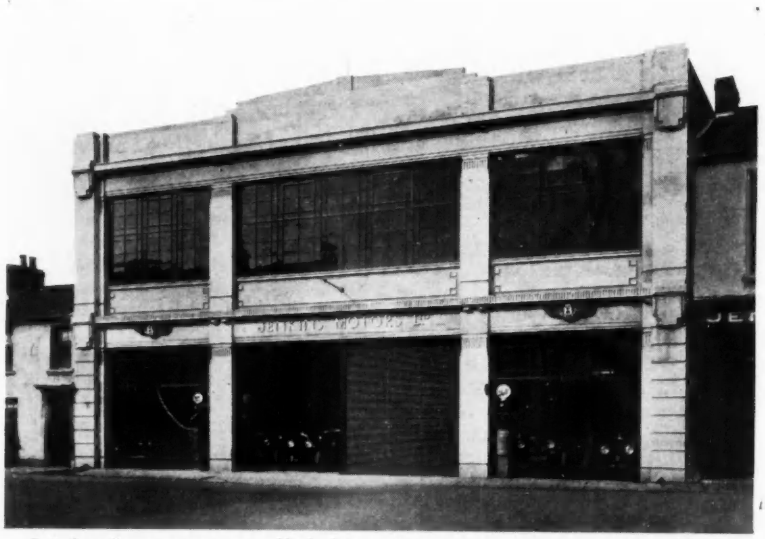
With respect to the requirements and characteristics of the various systems above mentioned, these may be briefly summarized before proceeding farther.

The Open Grate. Extra space for the heating appliances is not usually involved in this system, as in most buildings the grates already exist. Fuel storage, however, is an important factor, and involves occupying space which is not always provided conveniently. The system also involves the manual handling of all the fuel consumed, and the rehandling for removal of all the refuse, which may readily amount to 20 per cent. of the original fuel and is also of a very dirty and inconvenient nature. Ultimate disposal of this refuse does not involve cost, since that is borne by the local rates.

Closed Stoves for Solid Fuel. While this is one of the cheapest forms of heating, there are many conditions under which it is inconvenient and inartistic. The heating appliance usually requires space additional to that provided for open grates, and the most effective disposition of the closed stove—namely, the centre of the area to be heated—is usually the least convenient for the disposal of the fumes via the flue or stack. Here again storage of fuel and disposal of refuse are involved.

Central Heating with Solid Fuel. The heating plant for this system is usually disposed in a basement or similar situation, where its presence is not inconvenient to the user, but nevertheless the space is occupied and must be counted as a factor in the cost. Storage of fuel and removal of refuse again are factors, as in the previous systems. The transmission elements, or radiators, however, can be disposed more suitably for proper heating than is the case with the open grate or closed stove, and individual control of the amount of heat given out by each is a simple matter. This applies equally to central heating by water circulation and to the use of heated air introduced by various means. So far as efficiency goes, there is very little difference between the use of water and of air as the carrying medium for the distribution of the heat.

Flued Gas Fires. This method of heating has become very popular, owing to the fact that the gas stove can occupy the position usually taken by the open grate, and the chimney stacks be utilized for carrying off the waste products without involving any structural modifications of the building. The efficiency of this type of heater has been considerably increased



Reinforced concrete garage, York Street, Swansea, for Messrs. Jenkins Motors, Ltd. Designed by Hubert Rogers and Ward. Showrooms are provided on either side of the entrance.

of late years, and 50 per cent. can be taken as a representative figure for modern flued gas fires.

Flueless Gas Radiators. The efficiency of the flueless gas radiator, which is very high, approximating to 100 per cent., gives it a direct claim to consideration, particularly in view of its easy regulation by automatic means, such as thermostatic or steam-pressure control. This type of heater requires the minimum of attention, and can be left for long periods during which it will control the temperature of the room with quite reasonable accuracy. Unlike the flued gas fire, however, it has the disadvantage of discharging into the atmosphere the products of combustion, and in rooms which are not well ventilated this can become a serious matter, especially if the adjustment of the burner is not such as to give perfect combustion.

In this connection it may be remarked that town gas of the high calorific value supplied today is difficult to burn completely; owing to its low velocity and small bulk per heat unit, it does not provide the necessary kinetic energy to induce through the burner adequate air for rapid combustion. Hence there is a danger of part of the air-gas mixture being chilled before combustion is complete, with the resulting unpleasant odour which sometimes accompanies gas burning. This may occur but not be detectable when there is reasonable ventilation, but it is important in closed rooms. The complete combustion of coal-gas produces only carbon dioxide and water vapour, which are harmless; but should lack of sufficient air or chilling of the flame prevent complete combustion, small quantities of carbon monoxide and oxide of nitrogen, both of which are extremely poisonous, are produced. The occurrence of these gases to some extent is inevitable in the burning of town gas, though the quantities may be only minute. As to their significance, it may be stated that one part by volume of either of the gases mentioned per 10,000 volumes of air breathed is considered to be harmful and 5 parts per 10,000 distinctly dangerous to health. These concentrations, however, do not often occur, even with the flueless gas heater, since the high efficiency of this form of heater reduces the actual amount of fuel consumed for normal requirements to a relatively small quantity. These considerations, however, represent an argument against the use of flueless stoves for domestic rooms which are continuously occupied and liable to be closed for long periods.

Central Heating by Submerged Combustion. The use of the submerged flame, as in the Hammond system for central heating, has already been discussed in these columns and need only be referred to briefly at the moment. Owing to its exceptionally high thermal efficiency (approximately 95 per cent.) the fuel cost can be taken as practically the purchasing cost per therm. The mixing and control of the fuel and air necessitates embodying an air compressor in the plant, but the complete installation is compact and automatic in its operation, requiring practically no supervision except for starting and stopping. Unlike the flueless gas heater, there are no products of combustion discharged into the air of the room being heated, so that for cleanliness and convenience of heat distribution the system ranks with the radiator

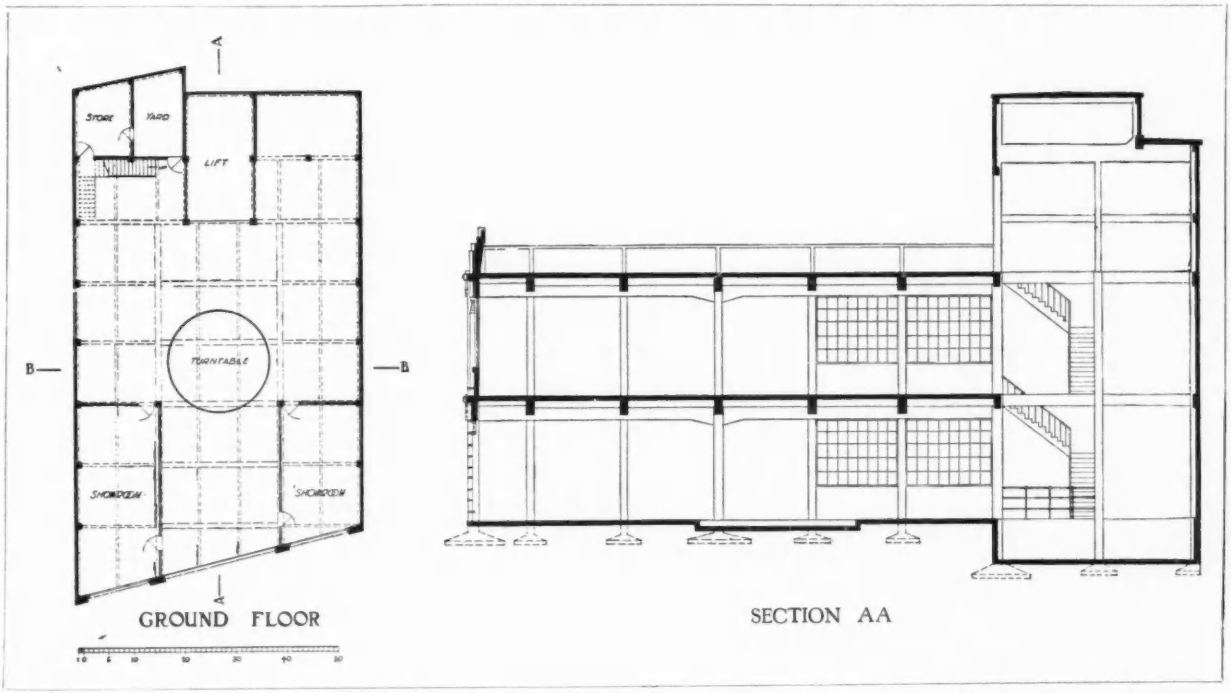
system supplied by a central boiler, without involving the employment of a chimney stack to produce a draught. Moreover, relatively small units are as economical as large ones.

Gas Circulators and Geysers. For water-heating the gas circulator, like the geyser, has a high efficiency, approximating to 80 per cent. of the potential heat of the fuel. The cost is high compared with that of the central-heating stove burning solid fuel, but as against that, thermostatic control confines the fuel consumption to that which is actually required for the predetermined heat, and, therefore, in practical use the cost may be relatively less; for heating with solid fuel does not readily permit reduction of fuel consumption when the desired heat has been obtained, and hence introduces an element of extravagance. The gas circulator and the geyser have definite advantages for intermittent heating, and as the consumption is negligible when no heat is being demanded, under some conditions this feature can well discount the higher cost of fuel per heat unit. The gas circulator system involves much less space than furnaces for burning solid fuel, and also does not necessitate accommodation for fuel storage or the removal of refuse.

Heating by Fuel Oil. On the basis of thermal value, fuel oils are more costly than solid fuels, but very much less than gas. They do not, however, involve nearly so much space for storage as is required for coal and coke, nor do they leave a refuse requiring removal. Further, control of combustion with fuel oil can be effected with considerable facility, and a high efficiency of heat transfer to boilers, circulators, etc., is possible. At 60 per cent. efficiency a fuel oil at 80 shillings per ton is about the same as coke in a central-heating boiler at 45s. per ton, so that in many cases fuel oil can be considered as competitive with coke. The burning of fuel oil, however, involves atomizing it by pressure, steam, or compressed air, and the burning equipment must include the necessary apparatus.

Electric Heating. There have been many endeavours to popularize electric heating for houses and buildings, and unquestionably considerable progress has been made. Nevertheless, this progress at present is more the result of convenience and facility than price competition. Despite the offer of electricity during low-load periods at ¼d. per unit, this source of heating still remains one of the most expensive. Where direct use is made of the current and no heat-storage system is involved, so that 100 per cent. heating efficiency is obtained, the cost is more than twice that of coke at 40s. per ton in a central-heating boiler operating at 50 per cent. efficiency. In most cases, further, an electric-heating system taking current under these terms requires to store heat for use during the period when current is not available at that price. For this purpose water storage or oil storage can be used, the heating elements being immersed in suitably insulated storage tanks, the accumulated heat of which is utilized later as required, by means of calorifiers. Under such conditions there is some loss of efficiency by radiation, etc., during the storage period, but assuming 85 per cent. efficiency as possible, the cost per therm of electric heat at ¼d. per electrical unit is 8·5d. This, however, is not so high as gas in the flueless gas heater at 9d. per therm.

On the other hand, the cost of the electric-heat storage installation has to be taken into account, as also the space occupied, though the radiators can be disposed for effective heating with the same facility as the flueless gas radiator. Electric heating has the outstanding advantage that in whatever form it is used it has no detrimental effect upon the atmosphere of the room or building, and can be applied in a variety of forms for the maximum of convenience and artistic effect. Consequently, for intermittent heating electricity will always retain a certain popularity, even when it cannot be obtained at the low rate of ¼d. per unit. As an offset to its high cost of current must be placed its cleanliness, absence of destructive effects on its surroundings, and the reduction in



Reinforced concrete garage, York Street, Swansea, for Messrs. Jenkins Motors, Ltd. Designed by Hubert Rogers and Ward. Ground-floor plan and longitudinal section. A special feature of the building is the use of the roof for floor space and storage for lorries, etc. Lavatory accommodation is provided on the first floor.

labour generally which results from its cleanliness and convenience.

In other applications electric heating, even at ¼d. per unit, is not so attractive. For example, the electric hot-plate for boiling, etc., varies in efficiency from 30 to 60 per cent., with a corresponding increase in cost. In appliances, however, which employ the immersed heating element, the efficiency is much higher, and from various tests electricity appears to be very economical as a source of heat for cooking.

Summing up the whole question of the cost of these various systems, it is necessary, in forming a judgment, to take into consideration all the local conditions—the convenience demanded, the continuance or intermission of operation, the cost of plant and the space occupied, the fuel storage facilities available, and the importance of any regular attendance demanded, as well as the cost of fuel consumed. The conditions of no two cases are identical, and hence what may be the most economical method for one case may be much less so in another.

(*Concluded*)

THE HOUSE OF WILLIAM BRUCE: VII

An Architect's Home And Its Influence on English Architecture

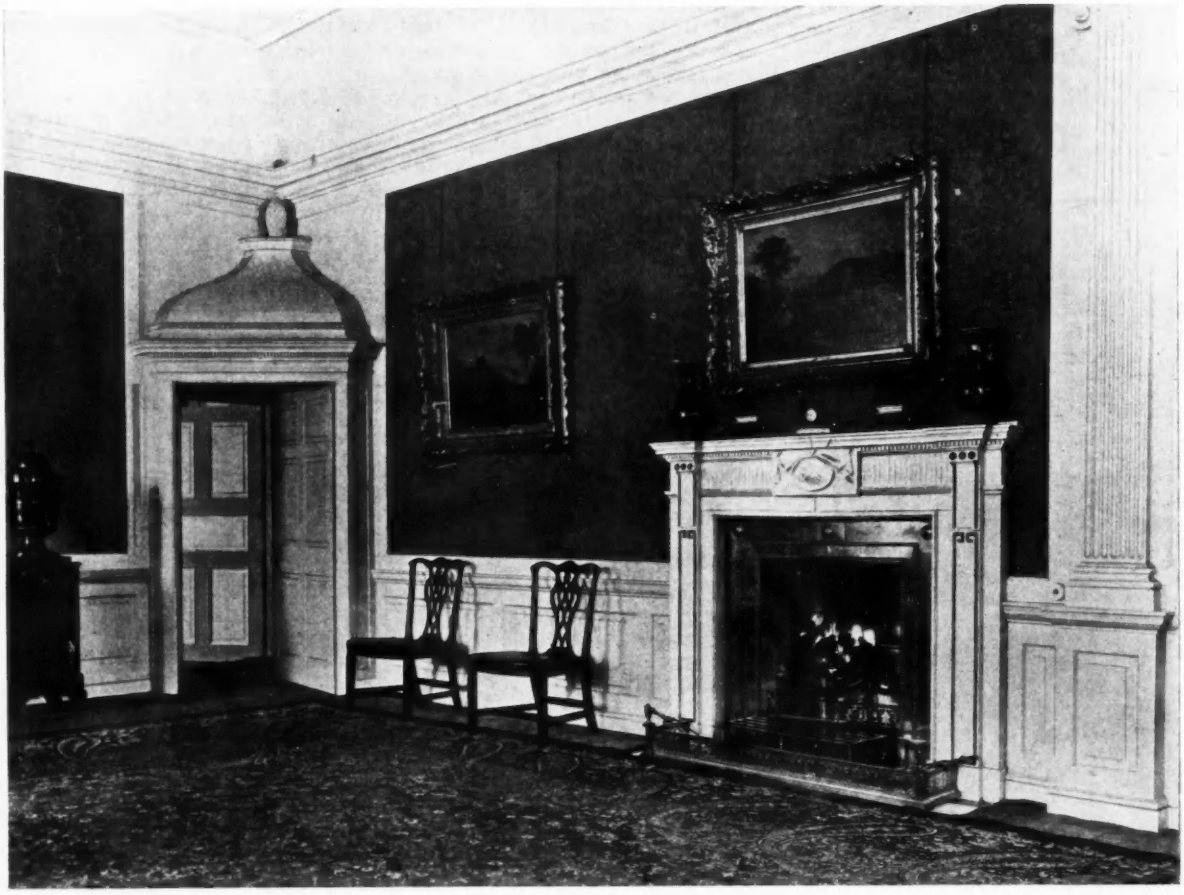
THE photographs and measured drawing reproduced on this and the facing page respectively, are taken from the dining-room, which is situated on the garden front of the house. It is entered from the drawing-room by a door placed in the corner of the room. Another door is set back in the adjoining wall, giving access to a corridor.

From close study of the plan (see issue of September 11) it will be seen that the corridors are of simple layout. It must, of course, be noted that corridors at the time of the erection of the house were a remarkable addition to the internal arrangement of the planning of a building.

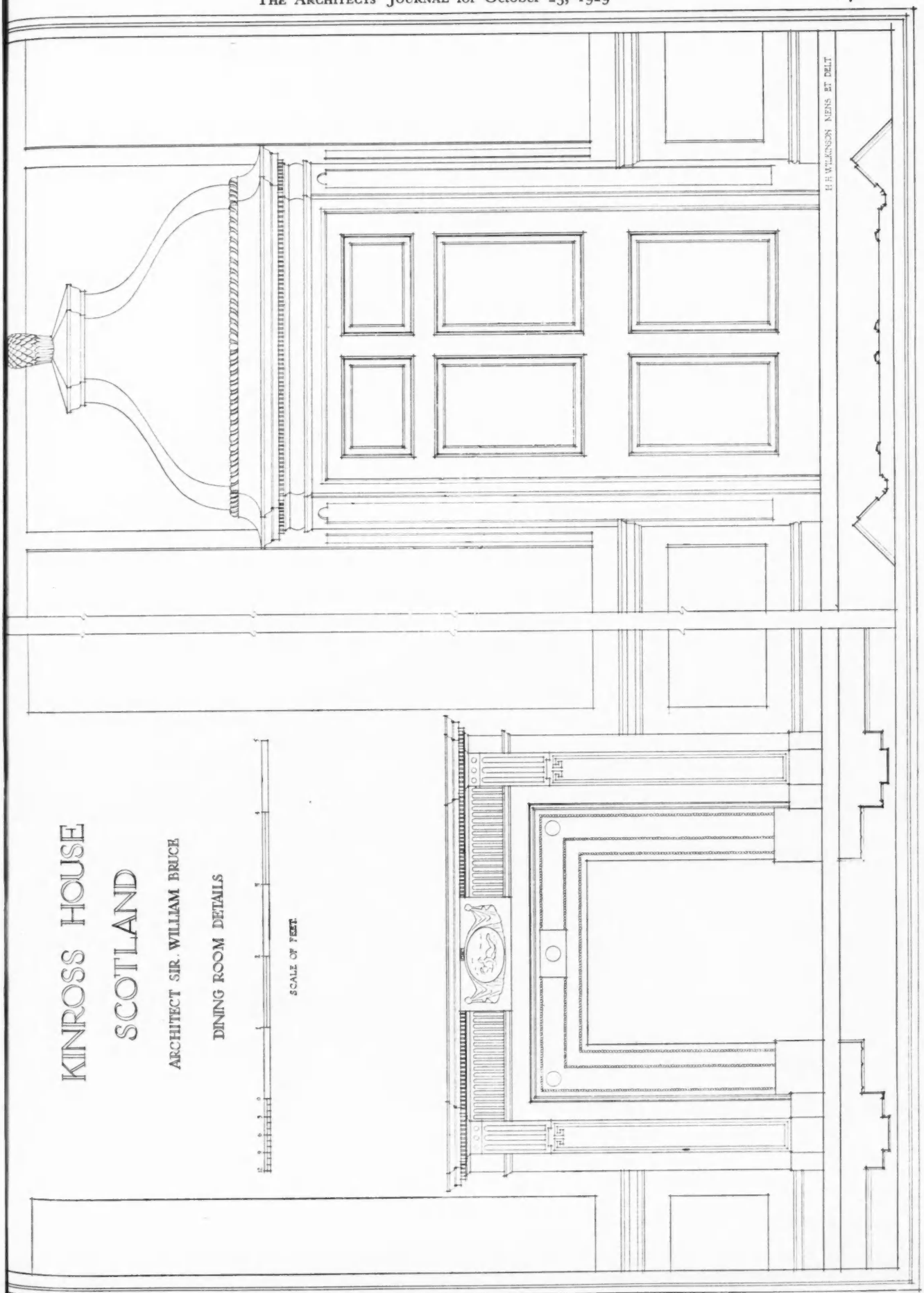
At the end of the corridor, and practically outside the dining-room door, is a lift. This lift was probably incorporated at a later date. The other end of the corridor gives on to the large entrance hall.

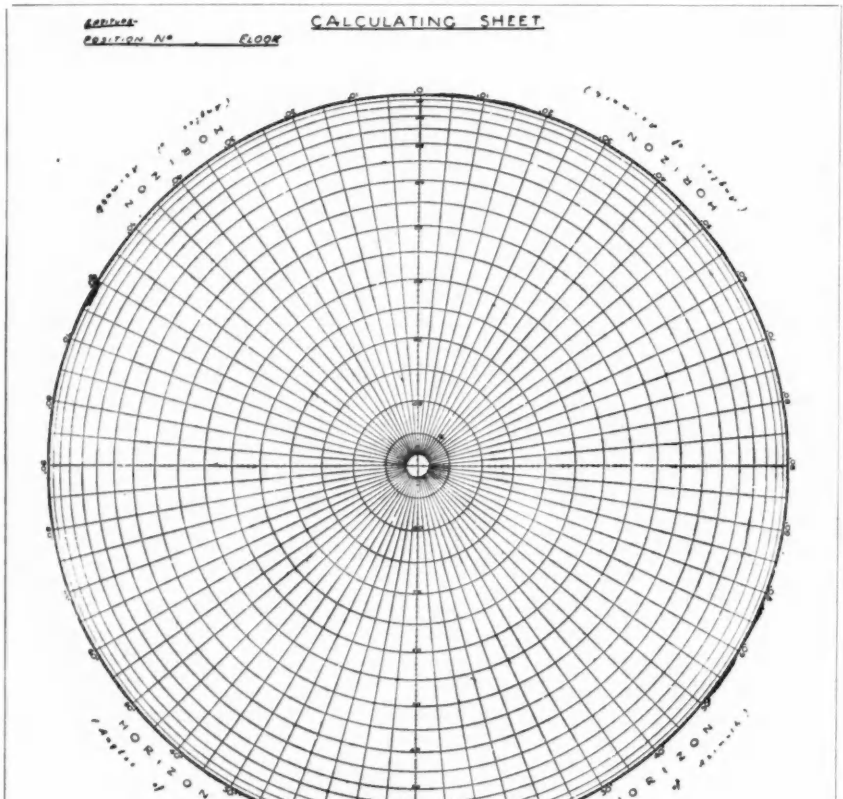
The effectiveness of the internal wood-finishing can be noted from the doorway with its domed canopy and surmounting acorn seen in the illustration below. The fireplace, although not so elaborate as many of the others in the house, is of a quiet and dignified design.

(*This article is now concluded. Further details, drawing, and a layout plan will be published next week.*)



The dining-room, Kinross House. It is situated at rear of the house with windows on one side fronting on to Loch Leven. The door shown gives access to the adjoining drawing-room.


H.H. WILKINSON MENS ET DELT
KINROSS HOUSE
SCOTLAND
ARCHITECT SIR. WILLIAM BRUCE
DINING ROOM DETAILS
SCALE OF FEET



DAYLIGHT CALCULATIONS

A NEW TYPE OF DIAGRAM

OWING to the disadvantages of the rectangular form of calculating sheet, resembling a Mercator's projection, Mr. John Swarbrick, F.R.I.B.A., of Manchester, has devised three types of calculating diagrams for the purpose of measuring light on the horizontal plane in easement of light cases. Although everyone may be regarded as being familiar with the fact that all the degrees of longitude meet at the zenith, it is sometimes not always remembered that points near the zenith, which appear on the rectangular calculating sheet at a very considerable distance apart, may in reality be very close together. In order to remove the possibility of such a delusion, and in order to adopt a form of chart that at least bears some resemblance to the spherical surface which it is intended to represent, the new types of calculating diagrams have been produced. It is understood that no similar diagrams

Figure two. Polar calculating sheet for the measurement of the illumination of the sky on the horizontal plane.

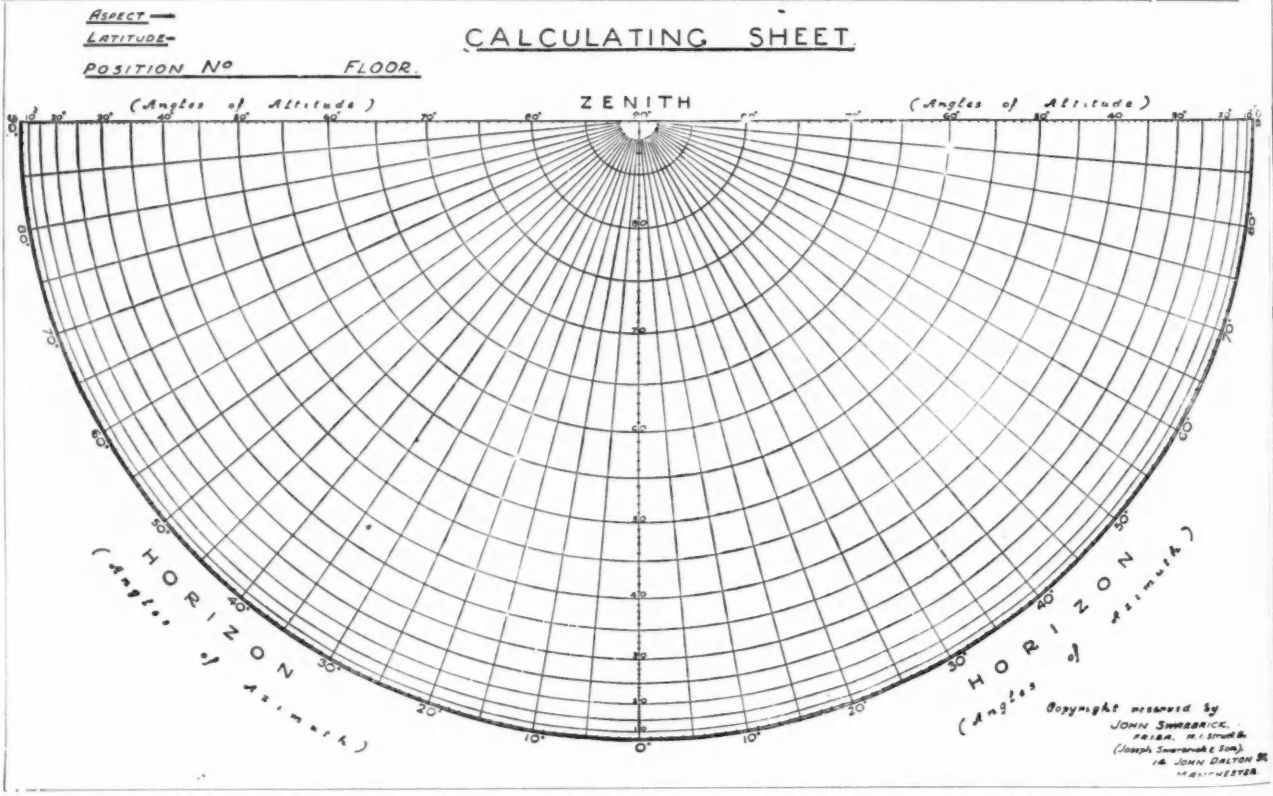
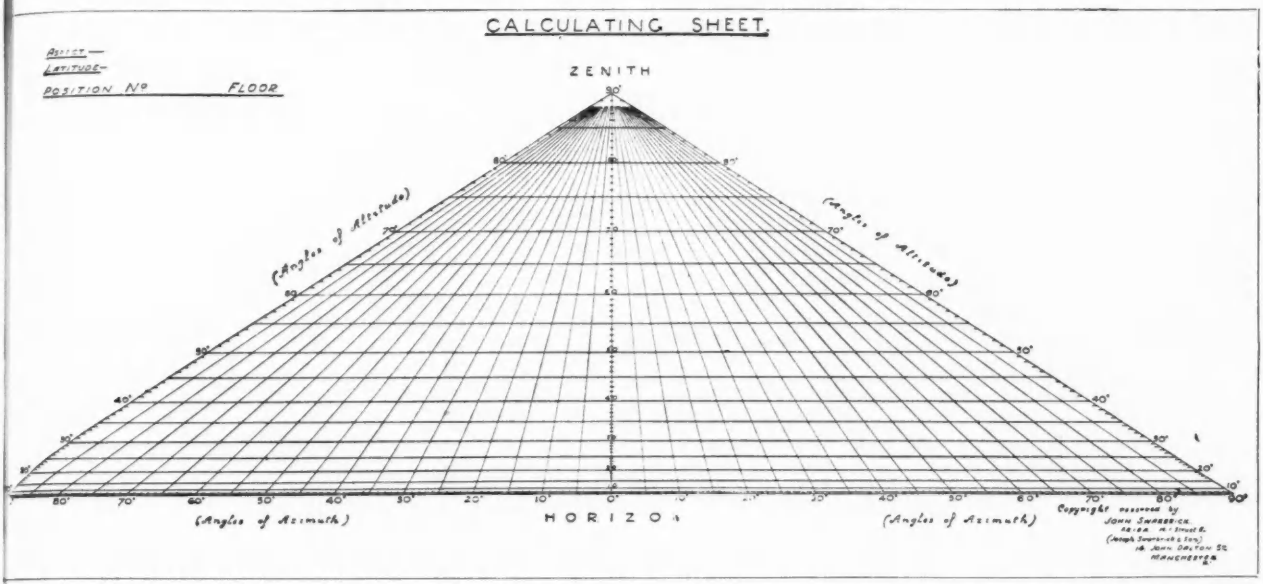


Figure one. Radial calculating sheet ready for measuring illumination on the horizontal plane, devised by the author and not previously published. For an example of its use, see figure four.



gure three. Triangular calculating sheet for measuring illumination on the horizontal plane, devised by the author and not previously published.

of radiating type have hitherto been published. A semicircular diagram, described as a radial calculating sheet, is illustrated in figure one. Figure two shows a circular diagram of similar construction, which has been described s a polar calculating sheet. The third iagram (figure three) is a triangular ne, constructed in accordance with the me principle. The last diagram s prepared owing to there sometimes ng an advantage in showing the izon as a straight line. When one mines the triangular segments im- diately around the zenith, in a odel of a sphere, the resemblance to the corresponding spheres in the radial and polar calculating sheets will be at once observed, and also the remarkable dissimilarity of the thin, elongated rectangles that represent the spaces in the old rectangular form of calculating diagram. The method of using the radial type of calculating sheet is most useful in dealing with skylights in flat roofs. Upon sheets of this kind a whole panorama of buildings may be plotted. See figure four.

It will be observed that radiating calculating sheets correspond in every respect with the spherical surface they are intended to represent, and are in every respect preferable to the artificial rectangular diagrams which have hitherto been used. In the case of the radiating diagrams there is no forcing of the scale, which, on the other hand, is perfectly natural. Moreover, there are advantages in their use which only those who have had some experience of them can fully appreciate. For example, the arcs of longitude and all vertical lines become radii, whilst all horizontal lines take elliptical forms. This circumstance in itself is particularly helpful as a check, enabling one in most cases readily to perceive whether an error has been made.

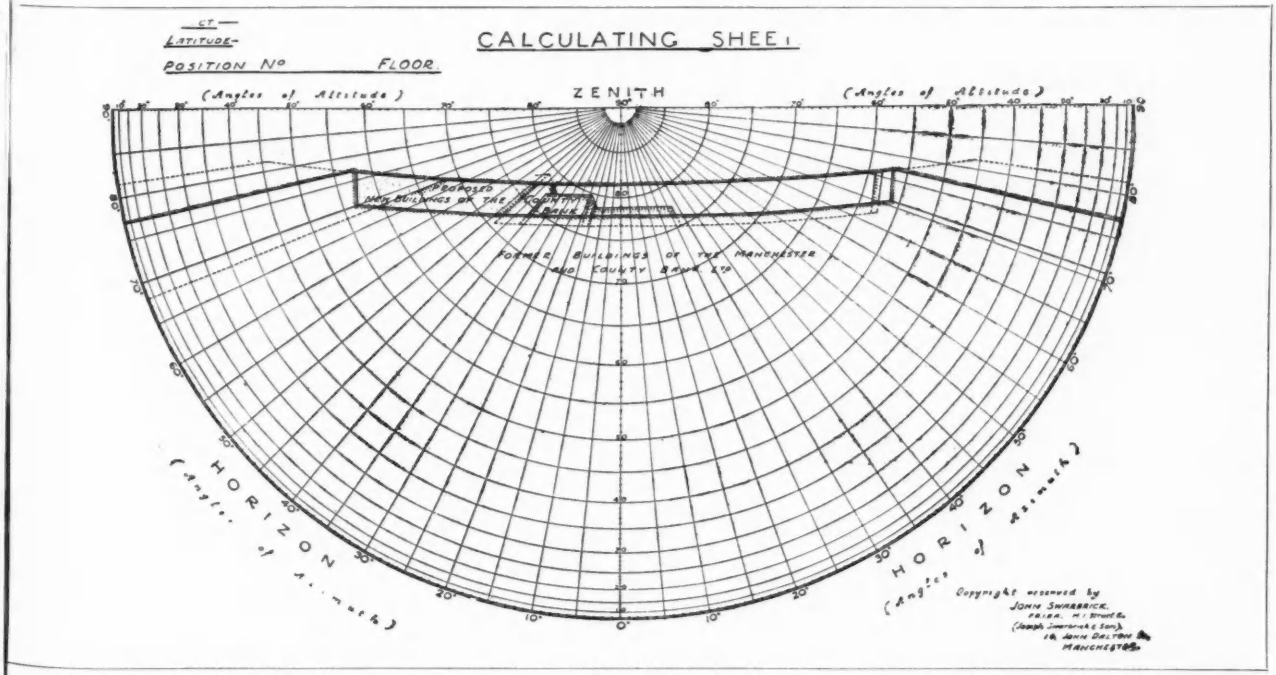


Figure four. Radial calculating sheet with plotting of illumination superimposed for first-floor window, overlooking internal area, adjacent to Piccadilly, Manchester, and showing both the former and proposed structures.

SOCIETIES AND INSTITUTIONS

EGYPTIAN TOMBS

Sir Banister Fletcher, P.R.I.B.A., lecturing at the Central School of Arts and Crafts gave an interesting description of the Pyramids and other tombs of the Egyptians. With many lantern illustrations he described the burial rites and the houses of the Egyptian dead, from the "mastabas," or small oblong buildings evolved probably from the prehistoric grave scooped in the sand, to the rock-cut tombs at Beni Hasan, with their rude, fluted columns, and the great pyramids at Gizeh, near Cairo, and elsewhere.

These remarkable productions of Egyptian art resulted from the desire to preserve the mummified bodies till, according to their belief, they should be re-inhabited by the soul. The Great Pyramid of Cheops, 482 ft. high and covering some thirteen acres—i.e. nearly as large an area as Lincoln's Inn Fields—was described in detail; this and the Second and Third Pyramids were all nearly 6,000 years old. Sir Banister illustrated the innermost recesses of the first-named pyramid, and described the mysteriously-guarded approaches to them.

The enigmatic Sphinx of Gizeh, standing as sentinel of the forgotten years which lie behind it, and the so-called "Temple of the Sphinx" with its very ancient and simple construction, were also referred to.

Sir Banister then described the romantic Tombs of the Kings at Thebes, on the western bank of the Nile, opposite the better-known Luxor, and their remarkable planning of chambers and corridors sloping back into the heart of the mountains.

SOUTH WALES INSTITUTE OF ARCHITECTS

Instead of their usual annual excursion and "Ladies' Day" to some outside place of interest, the above Institute decided to accept the invitation to pay an official visit to the National Museum of Wales at Cardiff on Thursday, October 10.

About 100 members of the Institute and their friends were present at a very enjoyable function. The party were received at the Museum by Dr. Cyril Fox, director, and Mr. A. A. Lee, secretary, with Mr. A. Dunbar Smith, F.R.I.B.A., the architect of the building, who conducted them over the present Museum and the important additions to it which are now in course of construction.

Tea was provided by the Museum authorities, and in extending a welcome to the visitors Dr. Fox made special reference to the great interest which local architects had taken in the Museum, and the importance of ensuring a continuation of such valuable co-operation in future years.

CORRESPONDENCE

THE HONEYWOOD FILE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I was delighted to note from the last issue of THE ARCHITECTS' JOURNAL that you contemplated publishing "The Honeywood File" in book form.

Curiously enough, I had already written a letter suggesting that this should be done, but on seeing the correspondence in last week's number I felt it unnecessary to post same.

Would it be possible for "Mr. Karshish" to arrange for "Honeywood Grange" to be burnt down and rebuilt in order to prolong this interesting series of letters?

L. EWEN HARPER

SEASONAL UNEMPLOYMENT IN THE PAINTING TRADE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—With the approach of winter, the spectre of unemployment and its attendant misery is one of grave concern for many thousands of workmen whose industry is affected by its seasonal nature. The house-painting and decorating trade is one of those which suffer considerably.

I want to appeal to the public, local governing authorities, landlords, and large firms, who have properties under their control, to favourably consider putting as much interior painting in hand as possible during the winter months. There is a mistaken idea abroad that painting work cannot be done successfully in winter. I want to assure all those interested that interior work can be done equally well in winter as in summer. A considerable amount of arrears in painting work is waiting to be carried out; neglect means deterioration and lowered value so far as property is concerned.

With the question of unemployment prominently before the public, and the urgent need for a solution, I trust that all concerned will immediately look round with a view to putting as much work in hand as possible during the forthcoming winter. In so doing, a great social service will be accomplished.

J. A. GIBSON

General Secretary, National Amalgamated Society of Operative House and Ship Painters and Decorators.

THE POLYTECHNIC HEATING PLANT

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The description of this plant in your October 9 issue is a welcome sign of the growing development of the electrical thermal storage method of central heating.

If it is agreed that Newcastle-upon-Tyne is in Great Britain, however, then the opening paragraph of the article is hardly accurate, as there were at least two central heating plants with high-tension electrode boilers and thermal storage at work in this country before the Polytechnic plant.

A 200-kilowatt 6,000-volt electrode boiler installation at the Hutton Terrace Motor Depot, Newcastle-upon-Tyne, has been working successfully since September 1925. A 2,400-kilowatt plant with electrode boilers and thermal storage was set to work at Carliol House, Newcastle-upon-Tyne, in September 1927.

Newcastle cannot claim that it is in every way more go-ahead than London, but it can claim that in the practical application of this excellent and economical method of heating without smoke or fumes it gave London a good lead.

R. W. GREGORY

[We are informed by our contributor that in his excess of zeal the writer of the above letter probably did not grasp the distinction which is drawn between the type of plant installed at the new Polytechnic and of those in Newcastle to which he refers. The statement in the article appearing on page 544 of our issue is absolutely correct. It has never been claimed that the new Polytechnic plant is the first thermal electric storage plant in this country, but no apparatus of this particular kind has been employed previously. The installation at the Hutton Terrace Motor Depot is an electrode system placed directly in a thermal storage vessel. This earlier type of plant has the disadvantage that any local repair to an insulating or evaporating tube necessitates the complete loss of the water within the thermal storage vessel and the temporary stoppage of the hearing system. It was abandoned in favour of the independent electrode boiler, which enabled heating to be maintained with the boiler temporarily out of commission for any necessary purpose.

The other installation to which reference is made, i.e. that at Carliol House, employs steam boilers for the purpose of heat generation, and in order to employ water heating within the radiating system calorifiers must be installed for converting the steam heat to water heat.—Ed. A.J.]

COMPETITION CALENDAR

November 2. The City of Birmingham Museum and Art Gallery Committee propose to erect a Branch Art Gallery at the Pebble Mill Road entrance to Cannon Hill Park, and invite architects practising within the City boundaries to submit competitive designs. Total cost, £6,000. Assessor: Ernest C. Bewlay, F.R.I.B.A. Premium: £100. Application for conditions of the competition, etc., should be made to S. C. Kaines Smith, Keeper, Museum and Art Gallery, Birmingham. Deposit 10s. 6d. Latest date for submitting designs: November 2.

November 8. The Somerset Rural Community Council, in conjunction with the R.I.B.A., invite architects and architectural assistants resident in Somerset to submit designs for Country Garages and Petrol Filling Stations. Assessor: Harold E. Todd, A.R.I.B.A. Prizes: The "Sir Charles Wakefield" prize, £10 10s. and silver cup presented by the Somerset Automobile Association. Further prizes of £7 7s., £5 5s. and £3 3s. and two cups presented by the S.A.A. Particulars from the Secretary, Somerset Rural Community Council, 42 Bridge Street, Taunton. Deposit 10s. 6d.

November 30. The Hull Corporation invite architects to submit schemes in competition for the façades of the New Street from Paragon Station to Beverley Road, Hull, and openings to adjoining streets. Assessor: Sir Reginald Blomfield, R.A., P.P.R.I.B.A. Premiums: £750, £350 and £150. Applications for conditions of the competition. etc., should be made to J. R. Howard Roberts, Town Clerk, Guildhall, Hull. Deposit £1 1s. Latest date for sending in designs: November 30.

December 7. The Provost, Magistrates, and Councillors of Dumfries invite architects practising in Great Britain to submit competitive designs for the Town Hall and Municipal Offices, which it is proposed to erect on the site of the old Town Hall and of the Municipal Offices. Dumfries. Assessor: Sir George Washington Browne, P.R.S.A. Premiums: £300, £200, and £100. Application for conditions of competition, etc., should be made to R. A. Grierson, Town Clerk, Town Hall, Dumfries. Deposit £2 2s. Latest date for sending in designs: December 7.

December 14. The General Electric Company, Ltd., is to erect a "Pavilion of Light," including a suite of six rooms, at the 1930 *Daily Mail* Ideal Home Exhibition at Olympia, Kensington, S.W. The lounge, dining-room, bedroom, and nursery will be the subjects of one section of the competition for architects and decorative artists, while the kitchen and bathroom will be the basis of another for electrical contractors, with the object of demonstrating the ideal use and security of electrical equipment in these rooms. The assessors are Sir Edwin Lutyens, R.A., Sir Duncan Watson, Messrs. Philip Connard, R.A., Oliver P. Bernard, Douglas G. Tanner, and G. G. Wornum. Prizes will be awarded in three sections as follows: (1) Architects and artists—1st prize, £100; 2nd prize, 20 guineas; ten consolation prizes of ten guineas each for next best work. (2) Electrical contractors—1st prize, 50 guineas; ten consolation prizes value ten guineas each. There will be ten prizes of five guineas for the best Period Designs of Electric Light Fittings. Applications for conditions and particulars of the competition should be addressed to "Electrical Contractor," *Daily Mail*, Carmelite House, E.C.4, before October 26, 1929. The competition closes on December 14, 1929.

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

TRADE NOTES

Messrs. E. Pollard & Co., Ltd., shopfitters, have paid an interim dividend of 2½ per cent., less tax, for the year ending December 31, 1929.

Messrs. Regants, Limited, of 17 Shepherds Bush Green, London, W.12, have issued a catalogue of their lighting units in Regant "corrected" glassware. The most important feature of this glass is the introduction of a special pigment which is claimed to balance the red-orange, yellow-green, and ultra-violet rays, and to transmit a more natural light to which the eyes are accustomed. It is claimed that owing to the absence of impurities there are minimum absorption and perfect diffusion. Regant "corrected" glass units, it is stated, emit a perfect white illumination which is claimed to be the nearest approximation to daylight without cold blue light. In the catalogue are shown designs for interior and exterior use, each type of which is devised to take gas-filled bulbs of various powers. The fittings are made in a variety of designs for all types of buildings: churches, public halls and institutions, theatres, hotels, offices and homes.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Masonic Temple (596–603): General contractors, R. Carlyle & Co., Ltd., who were also responsible for draining, bricklaying, carpentry, joinery and masonry. Sub-contractors: W. Macdonald & Co., Ltd., reinforced concrete floors, etc.; Robinson and Kershaw, steelwork; Earp, Hobbs and Miller, stone and woodcarving; J. and H. Patteson, marble work; C. W. Williams & Co., Ltd., tiling; The Empire Stone Co., Ltd., artificial stone work; Etchells, Congdon and Muir, Ltd., electric passenger and service lifts; Morrison, Ingram & Co., Ltd., sanitary fittings; G. Wragge, Ltd., metal casements; G. Jackson and Sons, Ltd., fibrous plaster; Haywards, Ltd., patent glazing; Ed. Hart and Son, ornamental ironwork; Edgar Brandt, metalwork; H. Hope and Sons, Ltd., window gearing; the Luxfer Prism Syndicate, Ltd., stallboard lights; Wm. Norris & Co., floor polishing; Wm. Royle & Co., slater; J. Jaffrey & Co., plumber and glazier; C. E. Harwood, Ltd., plasterer and painter; Scott Morton and Tynecastle Co., Ltd., wood panelling and hardwood work; W. F. Spencer, heating and ventilating; Laidlaw and Thomson, Ltd., ironmongery; John Adams, Ltd., electrical work; Bagues, Ltd., special electric light fittings, modelled by H. J. Dow; John Morris and Sons, Ltd., fire hydrants. The whole of the flooring in this building was executed in Austrian oak, gurjun, teak, and beech, and was carried out by A. M. Macdougall and Son.

The First Clubland Church (pages 604–608): General contractors, F. and H. F. Higgs, Ltd., who were also responsible for the demolition and partitions. Sub-contractors: Kleine Patent Fire Resisting Flooring Syndicate, Ltd., fireproof construction; Ames and Finnis, tiles; Haywards, Ltd., patent glazing; Stuart's Granolithic Co., Ltd., artificial stone; Hollis Bros., wood-block flooring; Aston Construction Co., structural steel; Benham and Sons, Ltd., central heating; Yannedis & Co., door furniture; Crittall Manufacturing Co., Ltd., casements; Norris Warming Co., electric wiring; Troughton and Young, Ltd., electric light fixtures; Pontifex and Sons, sanitary fittings; Starkie Gardner, Ltd., metalwork; Bennet Furnishing Co., oak pews and special oak furnishings throughout the club rooms.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

30241. Bauer, B. Steel skeleton for reinforced concrete structures. October 5.

29781. Cunningham, E. A. Manufacture of building bricks, etc. October 2.

29935. Davies, D. B., and Griffiths, W. D. Brick or block. October 3.

29875. Dennison, Kett & Co., Ltd., and Moss, D. J. Rolling-shutters.

30027. Evers, W. H. Making hydraulic mortar, etc. October 3.

SPECIFICATIONS PUBLISHED

319633. Muller, G. H. Construction of walls, partitions, pillars, and similar structures.

319811. Pollard & Co., Ltd., E., and Pollard, H. E. Fireproof doors, shutters, and the like.

300925. Charbonnier, P. L., and Bardot, J. E. Concrete or like slab or block walls.

ABSTRACT PUBLISHED

317595. Woodall-Duckham (1920), Ltd., and Duckham, A. M. Cement guns.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

Messrs. Blake, Son and Williams propose to provide a shopping centre in Old Lodge Lane, COULSDON.

The COULSDON U.D.C. has asked the surveyor to report as to the provision of fifty additional houses on various sites.

In connection with the KENNINGTON PARK extension, the L.C.C. is being asked to provide an open-air swimming bath at an estimated cost of £10,000.

The Ministry of Health is to hold an inquiry into the application of the BERMONDSEY B.C. for a loan of £24,000 for the erection of a branch laundry, library, and maternity centre in Silver Street.

Plans passed by the CAMBERWELL B.C.: Building, Rye Lane, Elm Grove and South Grove, for Messrs. North, Robin and Wilsdon; street, Overhill Road, for Messrs. Farlow and Hoare; eight houses, Commercial Road, for Mr. F. A. Powell; two shops, Peckham Rye, for Messrs. Dowton & Co.; new shop front, 14-16 Rye Lane, for Messrs. J. Curtis and Son, Ltd.

Plans passed by the BERMONDSEY B.C.: Warehouse, 55-57 Tanner Street, for Mr. H. W. Wagstaff; workshop, 31-35 Queen Elizabeth Street, for Messrs. Stock, Page and Stock, architects; extensions to factory, corner of Weston Street and Market Street, for Messrs. Geo. Parker and Sons, Ltd.; cooperage shed, Lavender Wharf, Rotherhithe Street, for Messrs. H. Somerford and Son, Ltd.

Plans passed by the COULSDON U.D.C.: Four houses, Maripit Lane, for Mr. H. C. Doddrell; bungalow, Kingswood Way, for Mr. A. W. Tatman; two houses, Woodfield Hill, for Mr. S. H. Lund; two houses, Woodmansterne Road, for Mr. H. Salter; fifty-six houses, Whyteleafe Estate, for Messrs. O'Sullivan, Ltd.; shop and four cottages, Godstone Road, and Lower Road, Kenley, for Mr. J. P. Oldaker; bungalow, Chipstead Valley Road, for Mrs. W. Luff.

Plans passed at SANDERSTEAD: Two houses, Briton Close, for Mr. H. Hawkes; shops, Addington Road, for South Suburban Co-operative Society; two houses, Foxearth Road, for Mr. J. W. K. Nichols; four houses, Addington Road, for Messrs. Crowley Bros.; two houses, Foxearth Road, for Walton Heath Land Co.; house, Foxearth Road, for Mr. J. W. Nichols; bungalow, Farleigh Road, for Mr. S. J. Hipwell; bungalow, Woodland Way, for Mr. Bertram James Watts.

Plans passed at PURLEY: Alterations and additions, 16 and 18 High Street, for Messrs. Stevenson and Rush, Ltd.; house, Manor Wood Road, for Mr. J. G. Cooper; house, Selcroft Road, for Mr. E. A. Matthews; sixteen houses, Old Lodge Lane, or the Old Lodge Estate, Ltd.; bungalow, Riddlesdown Road, for Mr. H. Thomas; house, Copse Hill, for Mr. J. G. Cooper; house, Green Lane, for Messrs. W. R. Roach, Ltd., and house, Green Lane, for Mr. W. R. Roach; additions and alterations, Downs Court School, Godstone Road, for Girls' Public Day School Trust Co.

SOUTHERN COUNTIES

Mr. Pettman is to lay out two new roads on his estate at GRAVESEND.

The DARTFORD U.D.C. contemplates the development of the Heath Lane housing estate.

The PORTSMOUTH Corporation has purchased 4½ acres of land at Port Royal farm for extensions to the mental institution.

Work will shortly commence on the erection by the Carlton Cinema Co., Ltd., on the delayed scheme to erect a new picture theatre at Christchurch Road, BOSCOMBE.

The BOURNEMOUTH Corporation Housing Committee has authorized the borough engineer to obtain tenders for the erection of forty-three parlour-type houses on land near Charminster Road.

In connection with the development of the sea front, the BOURNEMOUTH Corporation has decided upon the extension of the promenade from Manor Bay, eastwards, to Fisherman's Walk, and thence to the Grange, Southbourne; the provision of a bathing pool, refreshment rooms, conveniences, and bathing stations at Durley Chine, and the erection of additional bungalows. The total cost is estimated at £85,000.

Plans passed by the HASTINGS Corporation: House, Upper Church Road, St. Leonards, for Mr. H. J. Richardson, architect; house, Harold Road, for Mr. H. J. Hunt, architect; additions, Brittany House, London Road, St. Leonards, for Mr. H. M. Jeffery, architect; six houses, St. Helen's Road, for Mr. W. G. Stanton; alterations, 28 Grand Parade, St. Leonards, for Messrs. Attwells, Binfield & Co.; additions, Mitre Hotel, High Street, for Messrs. Mackeson & Co., Ltd.; conversion into flats, Baston Lodge, Upper Maze Hill, St. Leonards, for Mr. P. H. Oxley, architect; gymnasium, Institute Notre Dame des Missions, for Mr. J. D. Hicks, architect; additions, 29 Cambridge Road, for Mr. F. Bowcock, architect; house, Sedlescombe Road, St. Leonards, for Mr. A. J. W. Lewis, architect; two bungalows, Old London Road, for Mr. P. H. Oxley, architect; house, Sedlescombe Road, for Mr. R. C. Goffin; two shops and nine houses, Bexhill Road, St. Leonards, for Mr. H. H. Ford, architect, on behalf of Bexleigh Estates, Ltd.; two houses, Linton Road, for Mr. H. M. Jeffery, architect; shops and flats, 61-64 Queen's Road, for Mr. J. B. Ward.

Plans passed by the BOURNEMOUTH Corporation: Four houses, Egerton Road, for Messrs. F. W. Burton and Sons; three shops, Castle Lane, for Mr. F. J. Marks; alterations, Gervis Place, for Messrs. Plummers, Ltd.; showroom, etc., 664-6 Christchurch Road, Boscombe, for Mr. G. Rogers; additions, Bournemouth Synagogue, Wootton Gardens, for the Trustees; alterations, 57 Charminster Road, for the International Tea Stores; offices, Norwich Avenue, for the Hants and Dorset Motor Services, Ltd.; addition, "Wentworth Lodge," College Road, for the Bournemouth Collegiate School; stores, rear of 893 Christchurch Road, Boscombe, for Mr. F. Rigler; paint shop, Wimborne Road, for Mr. J. V. Lee; additions, British Legion Club, Wimborne Road, for the Committee; alterations, Exeter Park Road, for the Whitehall Hotel, Ltd.; booking kiosk, Exeter Road, for the Keystone Filling Stations, Ltd.; labour hall, Lincoln Avenue, for the Trustees; six shops, Charminster Avenue, for Mr. S. G. Ward; fuel store, 72 Charminster Road, for the Westminster Bank, Ltd.; three houses, Thistlebarrow Road, for Messrs. Hayward and Son; nine houses, Nursery Road, for Mr. E. Wareham; seven houses, Claremont Road, for Mr. S. G. Ward; motor showrooms, etc., 908 Christchurch Road, for Mr. S. Hardy; three houses, Priory View Road, for Mr. A. Vine; shop, Tuckton Road, for Mr. J. Zonfrillo; eleven houses, Rufford Gardens, for Mr. T. Sutcliffe; ten houses, Seafield Road, for Messrs. M. Brown and Sons; pavilion, Seafield Road, for Messrs. Gibbs & Co.; four houses, Elmes Road, for Mrs. Threfall; forty-four houses, Seafield Road, for Mr. S. Kermode; six houses, Grenfell Road, and The Avenue, for Messrs. T. and H. Fry and C. Newton; four houses, Victoria Avenue, for Mr. F. Ricketts; four houses, Arden Road, for Mr. H. Masters; two houses, Elmes Road, for Mr W. A. V. Haycraft; two houses, Victoria Avenue, for Messrs. Berry and Wood; four bungalows, Brockenhurst Road, for Mr. S. G. Ward.

SOUTH-WESTERN COUNTIES

H.M. Office of Works is to erect a telephone exchange at Chelston, TORQUAY.

Messrs. Stanley Richards & Co. are to develop an estate at Park Hill Road, TORQUAY.

The Torquay Corporation is seeking sanction for a loan of £13,600 for the construction of swimming baths at UPTON.

The PLYMOUTH Corporation has considered plans for the erection of fifty-seven houses to complete the North Prospect housing site, and decided that tenders be invited, such houses to be as far as possible of the "C" type.

The Devon C.C. and the local authorities of TORQUAY, PAIGNTON, and TEIGNMOUTH have agreed upon the purchase of the Shaldon toll bridge, the purchase price being £40,000. The cost of a new structure is estimated at £40,000.

The TORQUAY Corporation General Purposes Committee has decided to purchase the Y.M.C.A. premises adjoining the municipal buildings for £15,000, for the future extension of the municipal buildings and Carnegie library.

Mr. J. Wibberley, city engineer of PLYMOUTH, has prepared for consideration two schemes, one costing £246,000, and another £196,000, for the development of West Hoe by the provision of swimming baths, concert hall, and winter gardens.

Plans passed by the WEYMOUTH Corporation: Two houses, Southlands Road, for Mr. K. Openshaw; house, Old Parish Road, for Messrs. S. Jackson and Sons; seven houses, Coniston Crescent, for Mr. W. Knell; house, Grosvenor Road, for Messrs. J. A. Parsons and Son; house, Down Road, for Messrs. Andrews and Andrews; alterations, Portmore School, for Messrs. Andrews and Andrews; two houses, Cleveland Avenue, for Messrs. Theo. Conway, Ltd.

Plans passed by the TORQUAY Corporation: Two houses, Meadfoot Road, for Miss Rudd and Mrs. Harper; extensions, 31 and 33 Union Street, for Messrs. Marks and Spencer; house, Braddons Hill Road, for Mr. T. W. Swift; two bungalows, St. Katherine's Estate, for Mr. R. E. Narracott; alterations to shop, 84 Union Street, for Messrs. Stiles and Sons; four flats, Cleveland Road, for Mr. F. C. Yeo; new road, Warberry Vale Estate, for the estate authorities; business premises, Hele Cross, for the Torquay Co-operative Society; house, Hampton Estate, for Mr. Hirons; bungalow, Audley Park Estate, for Messrs. Kershaw & Co.; three houses, Teignmouth Road, for Mr. A. Williams; bungalow, Isaacs Hill, for Mr. S. Trevascus; house, Mead Road, for Gower Construction Company, Ltd.; two houses, Oakpark Estate, Shiphay, for Mr. Chippendale; layout of new road, off Wheatridge Lane, for Mr. R. Mallock; house, Marcombe Road, for Messrs. Riggs & Co.; two bungalows, Burridge Road, for Mr. G. Davey.

Plans passed by the PLYMOUTH Corporation: Three houses, Fernleigh Road, for Mr. H. Mills; two houses, Furneaux Road, for Mr. C. G. Edgcumbe; alterations, 12 Bedford Street, for Messrs.



House at Westcott, near Dorking. Designed by Arthur J. Stedman. All the principal rooms overlook the entrance front shown. On the ground floor, on the left, is the dining-room; and on the right, beneath the hipped roof, the drawing-room. The plans appear on page 623.

H. E. Closs & Co., Ltd.; alterations and additions, the Ship Inn, 1 Quay Road, for Messrs. Popplestone & Co.; two houses, Langstone Road, for Messrs. Hayter and Coles; two houses, Ford Park Road, for Messrs. Waycotts; alterations and additions, 9 and 10 East Street, for Mr. C. W. Selleck; two houses, Berrow Park Road, for Mr. J. F. Woodley; two houses, Venn Grove, for Mr. E. C. Cornish; five houses, Elmfield Road, for Mr. F. Westcott; classroom, St. Dunstan's Abbey, for the Sister Superior; alterations and additions, 9 George Street, for Mr. F. Holcenburg; five houses, Dale Gardens, for Messrs. Waycotts; house, Salisbury Road, for Mr. E. N. Coad; two houses, Venn Way, for Mr. H. Holmes; two houses, Elmfield Road, for Mr. R. T. Pearce; reconstruction of jam and pickle factory, Martin Street, for Messrs. J. Common and Son; garage, rear of Royal Sailors' Club, Morice Square, for the Committee; bungalow, Victoria Road, for Messrs. Pearce Bros.; alterations to factory, Beech Avenue, for Messrs. Clarke, Doble & Co., Ltd.; two houses, 19 and 20 Church Street, Stoke, for Mr. S. Cohen; garage, Laira Bridge Road, for Western National Omnibus Co.; layout of land, St. Levan Road, for Lord St. Levan.

EASTERN COUNTIES

Plans passed by the BEDFORD Corporation: Alterations and additions, Beverley Crescent, for Mr. E. H. C. Inskip; garages, Cavendish Hotel, for Messrs. Robinson and Hall; four houses, Miller Road, for Messrs. J. B. Saunderson; rebuilding inn (amended plan), Grey Friars Walk, for Messrs. R. Phipps & Co.; four houses, Howard Avenue, for Messrs. H. Young and Son; bungalow, Cutcliffe Grove, for Mr. E. H. C. Inskip.

MIDLAND COUNTIES

The BURTON-ON-TRENT Corporation is to erect twenty-eight houses on the Anglesey Estate.

Mr. E. Kinson is to construct a new street off London Road. STOKE.

Messrs. Shenton Bros. are to construct a new street off Hanley Road, STOKE-ON-TRENT.

The BIRMINGHAM Corporation is acquiring further property at Broad Street, in connection with the civic centre proposal.

The BIRMINGHAM Corporation is acquiring 120 acres of land at Water Orton, for sewage purification works.

The BIRMINGHAM Education Committee is to erect an elementary school in Severne Road, Hall Green, at a cost of £20,000.

THE STOKE-ON-TRENT Corporation is seeking a grant for a proposal for the extension of the maternity home at a cost of £35,000.

THE WALSALL Corporation Housing Committee recommends the erection of a further 1,000 houses.

The BIRMINGHAM Education Committee has obtained a site in Trescott Road, Northfield, for the erection of an elementary school.

The STOKE-ON-TRENT Corporation has prepared a scheme for the conversion of privies at a total cost of £57,000, and for the abolition of 5,000 ashpits at a cost of £18,000.

NORTHERN COUNTIES

A Roman Catholic school for 300 pupils is to be erected at Ardsley BARNSLEY.

At an estimated cost of £100,000, the L.N.E.R. transit sheds at GRIMSBY are to be reconstructed.

The West Riding Education Committee is to erect a senior school for 600 and a caretaker's house at HOYLAND.

The HULL Corporation has asked the city engineer to report on the desirability of widening or rebuilding Drypool Bridge.

The HULL city architect is preparing plans for the re-housing of persons displaced by the Aldbro Road and Sykes Street improvement scheme.

The HULL Corporation has instructed the city engineer to prepare plans for the erection of a bridge over the railway in Marfleet Lane.

Sanction is to be sought by the STRETFORD U.D.C. to borrow £18,163 for the provision of an elementary school at Low Moss Lane.

The WEST RIDING Education Committee is to provide two additional class-rooms at the Castleford, Normanton and district mining and technical institute at an estimated cost of £3,250.

The West Riding Education Committee has accepted tenders amounting to £34,619 in connection with the erection of an elementary school at Goole Road, THORNE.

The WEST RIDING Education Committee has approved revised plans in connection with the scheme of extensions at Skipton Grammar School, at a cost of £21,000.

The WEST RIDING Education Committee has agreed upon a revised scheme to cost £24,000 for adapting the Mitchell Memorial Home as a residential school for crippled children.

The HULL Corporation recommends the acquisition of the Queens Dock estate for an improvement scheme, the cost of streets and gardens being estimated at £45,000.

The West Riding C.C. has accepted separate trade tenders amounting to £43,599, for the erection of new offices for the registry of deeds, in Newstead Road, WAKEFIELD.

The Board of Education has approved the preliminary plans of the HULL Education Committee for the erection of an elementary school at Hall Road.

The BARNSLEY Corporation has obtained sanction to borrow £45,400 for the erection of 150 additional houses on the Burton Grange Estate, and authorized the borough engineer to proceed with the work of erection.

A joint committee of the YORK Corporation and the county councils of the North and East Ridings is to prepare a scheme for the provision of a mental institution for not less than 500 patients.

At a meeting of the ROTHERHAM Corporation the borough engineer reported that, on vacant land in Effingham, there was room for a block of shop and office premises which might cost £30,000 and also for two or twelve shops. He was instructed to prepare plans for such buildings for consideration.

Plans passed by the BARNSLEY Corporation: Additions to premises, Race Street, for Messrs. Gaimsters, Ltd.; additions to premises, Racecommon Road, for Eagle Manufacturing Co.; tin plate store and lift to works, Sackville Street, for Barnsley Canister Co., Ltd.; extension to saw-mill, and new timber shed, Twibell Street, for B.B. Co-operative Society, Ltd.

A super cinema is to be erected on the site of the Rink and Stadium at SUNDERLAND, by Messrs. Black. Building is to start in the spring of next year. The proposal is to demolish the present temporary buildings, now used as a Palais de Danse and Boxing Stadium, and erect on the major portion of the site a super cinema and theatre. The cinema will seat over 3,000 persons.

WALES

The SWANSEA Corporation is to prepare a scheme for the reconstruction of Llewitha Bridge, Carmarthen Road.

Plans passed by the SWANSEA Corporation: Two houses, Birchgrove Road, for Mr. F. G. McCutcheon; alterations, 21 Oxford Street, for Messrs. F. W. Woolworth & Co., Ltd.; garage and stores, Carlton Terrace Lane, for Messrs. Bennett Bros.; layout for fifty houses, Manselton Estate, for Sir C. Mansell; two houses, Pyll-y-domen Road, Manselton, for Messrs. Weaver Bros.; house, Llangyfelach Road, Clasemont, for Dr. H. Lewis; bungalow, Caepys, Treboeth, for Mr. S. Thomas; bungalow, Park Hill Road, Treboeth, for Mr. E. Morris; shop, Gower Road, Sketty, for the Estateways Builders, Ltd.; two houses, Derwen Fawr Road, for Mr. Syd. Davies; four houses, Glanmor Road, for Mr. A. E. Wright; bungalow, Goitre Fach Road, for Mr. T. F. Gardner; six houses, Gower Road, Killay, for Mr. H. Williams; two houses, Moorside Road, for Messrs. Samuel and Evans; shop, Pentregethin Road, for Mr. G. H. R. Davies.

SCOTLAND

The GLASGOW Education Committee has obtained a site at Germiston for the erection of an elementary school.

The GLASGOW Corporation Housing Committee is to obtain tenders for the erection of ninety houses at Carntyne extension site.

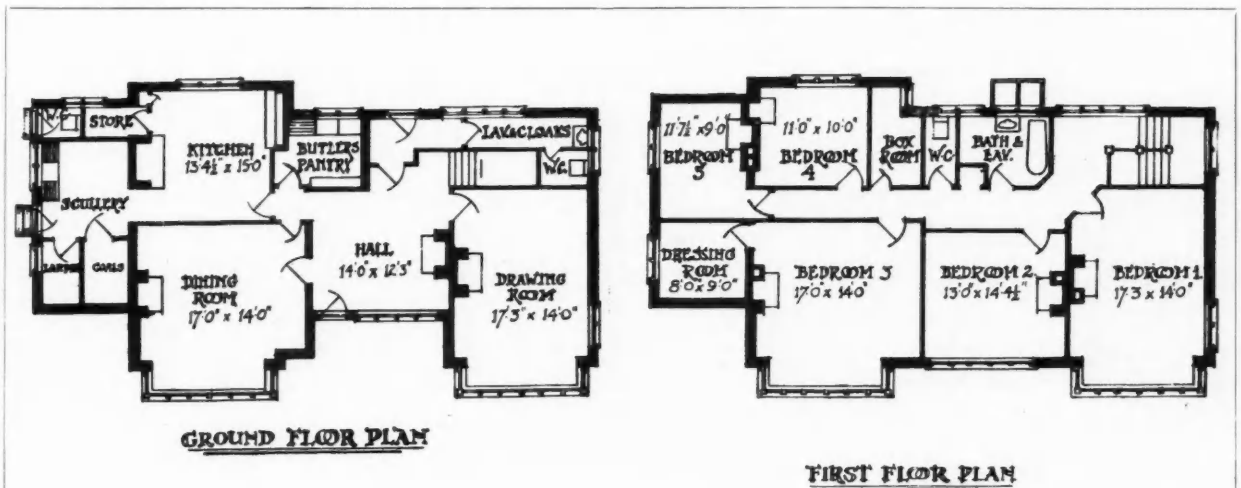
The Glasgow Education Committee is to erect a school at New Road and Calder Avenue, KNIGHTSWOOD.

The GLASGOW Education Committee is to extend the Govan secondary school at Dysart Street and Drumoyne Road.

The GLASGOW Corporation Housing Committee has prepared a scheme for tenements and shops on the cleared area at Gallowgate.

MISCELLANEOUS

The CAPE TOWN Corporation has approved a scheme for the erection of flats that can be tenanted by the poor, at a total cost of £16,000.



Ground- and first-floor plans of house at Westcott, near Dorking. Designed by Arthur J. Stedman. A photograph of the entrance front is reproduced on page 622.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury ..	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster ..	Yorkshire	1 7½	1 2½
B	Dorchester ..	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich ..	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7	1 2½
B_1	EAST-BOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
B_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_2	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.			£0	11 6
Thames ballast, per yd.			0	10 0
Pit gravel, per yd.			0	15 0
Pit sand, per yd.			0	12 6
Washed sand, per yd.			0	13 0
Screened ballast or gravel, add 10 per cent. per yd.				
Clinker, breeze, etc., prices according to locality.				
Portland cement, per ton			£2	8 0
Lias lime, per ton			2	0 0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.				
Transport hire per day:				
Cart and horse	£1 3 0	*Trailer*	£0	15 0
3-ton motor lorry	3 15 0	*Steam roller*	4	5 0
Steam lorry, 5-ton	4 0 0	*Water cart*	1	5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1 6
SPREAD and level, including wheeling, per yd.	0	1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10 6
TRIMMING earth to slopes, per yd. sup.	0	0 6
HACKING up old grano. or similar paving, per yd. sup.	0	1 3
PLANKING to excavations, per ft. sup.	0	0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.		
IF left in, add to above prices, per ft. cube	0	2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2 1
DO. 6 in. thick, per yd. sup.	0	2 10
PUDDLING, per yd. cube	1	10 0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3 0
DO. 6-2-1, per yd. cube	1	18 0
DO. in upper floors, add 15 per cent.		
DO. in reinforced-concrete work, add 20 per cent.		
DO. in underpinning, add 60 per cent.		
LIAS-LIME CONCRETE, per yd. cube	£1	16 0
BREEZE CONCRETE, per yd. cube	1	7 0
DO. in lintels, etc., per ft. cube	0	1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3 9
FINE concrete benching to bottom of manholes, per ft. cube	0	3 0
FINISHING surface of concrete spade face, per yd. sup.	0	0 9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¼ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra.	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard			
Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube 0 4 6
DO. framed in floors, roofs, etc., per ft. cube 0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube 0 8 6
PITCH PINE, add 33⅓ per cent.
FIXING only boarding in floors, roofs, etc., per sq. 0 13 6
SARKING FELT laid, 1-ply, per yd. 0 1 6
DO., 3-ply, per yd. 0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq. 2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run 0 0 4½
DO. 9 in. wide and over per ft. sup. 0 1 2

[*continued overleaf*]

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour*; MATE, *do.* 1*s.* 4*d. per hour*; ERECTOR, 1*s.* 9½*d. per hour*; FITTER, 1*s.* 9½*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour*; MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ⅜ in., per ft.	0	2	2
DO. ½ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour (plus allowances in London only)*; LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in. up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, 3/16 in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet 21 oz	0	0	11
DO. 26 oz			0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft	0	1	4
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.			

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; FRENCH POLISHER, 1*s.* 9*d. per hour*; PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	4	3
DO., *boiled, per gall.*	0	4	6
Turpentine, per gall	0	4	0
Liquid driers, per gall.	0	15	0
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	17	6
DO., *flat, per gall.*	1	5	0
DO., *paper, per gall.*	1	5	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	3/16 in.			½ in.			⅝ in.			¼ in.		
Qualities	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder ..	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak												
1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak												
1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, OCTOBER 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon.**

ESSEX, CAMBRIDGE, AND HERTFORDSHIRE SOCIETY OF ARCHITECTS, Chelmsford, Essex. General Meeting at St. Albans. Meet outside the West Front of the Cathedral. **2.30 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "Copenhagen, Past and Present." Last of a course of three Public Lectures by J. H. Helweg. (Lantern illustrations.) **5.30 p.m.**

THURSDAY, OCTOBER 31

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Second of a course of eight Public Lectures. "Athens." By Dr. Ernest A. Gardner. **5 p.m.**

FRIDAY, NOVEMBER 1

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Gothic Woodwork." By T. F. Wilson, F.R.S.A.I. **12 noon.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Meter and Instrument Section Meeting. **7 p.m.**

SATURDAY, NOVEMBER 2

Sunrise 6.56. Sunset 4.31.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section—Sculpture." By T. F. WILSON, F.R.S.A.I. **3 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Mears and Stainbank, Church Bell Foundry, 32 Whitechapel Road, E.1. Stations, Aldgate and Aldgate East. Party limited to 20 members only. **2.45 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, Manchester and District Branch. Visit to Davyhulme Hospital. **2.30 p.m.**

MONDAY, NOVEMBER 4

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last date for entry for R.I.B.A. Final Examination.

R.I.B.A., 9 Conduit Street, W.1. Inaugural Meeting. The portrait of Mr. Walter Tapper, A.R.A., F.S.A., painted by Sir William Orpen, R.A., will be presented to the Royal Institute, and the Medals and Diploma for a London building completed between 1926–1928 will be presented to Messrs. Easton and Robertson, FF.R.I.B.A.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C 2. Informal Meeting. **7 p.m.**

TUESDAY, NOVEMBER 5

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Practice Standing Committee.

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Ordinary Meeting. **6 p.m.**

WEDNESDAY, NOVEMBER 6

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Art Standing Committee and of the Board of Architectural Education Committee.

WESTMINSTER SCHOOL HALL (entrance in Dean's Yard). "Mystery Ships." By Rear-Admiral Gordon Campbell, V.C., D.S.O. Chairman, Viscount Burnham, G.C.M.G., C.H. Admission, 2s. 6d. **5.30 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Sessional Meeting. "Notes on Electric Warming, with special reference to Low Temperature Panel Systems," by R. Grierson, A.M.I.E.E., A.M.I.MECH.E. This meeting will take place at Swedenborg Hall, Hart Street, W.C.1. **7 p.m.**

ROYAL ARCHÆOLOGICAL INSTITUTE. At the Society of Antiquaries, Burlington House, W. "The Archæological Aspect of the Goidelic Question: A Critical Survey of the Bronze and Early Iron Age of Ireland." By Dr. Adolf Mahr. (Lantern Illustrations.) **5 p.m.**

THURSDAY, NOVEMBER 7

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting.

R.I.B.A., 9 Conduit Street, W.1 Meetings of the Board of Architectural Education Committee and of the Board of Architectural Education Prizes and Scholarships Committee.

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "The Restoration of an Ancient Castle to Modern Use." By Sir Charles Allom, F.R.S.A. **7.30 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C. 1. Yates Archæological Lectures. Third of a course of eight Public Lectures. "Olympia." Dr. Ernest A. Gardner. **5 p.m.**

FRIDAY, NOVEMBER 8

ILLUMINATING-ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Modern Incandescent Lighting in Kinema Studios," by W. H. Villiers and S. G. Double. **7 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Intermediate Examination until Thursday, November 14.

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Coal and its Combustion." By Andrew McCulloch, M.SC.TECH.A.I.C. **7 p.m.**

SATURDAY, NOVEMBER 9

Sunrise, 7.6. Sunset, 4.21

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to India House, Aldwych. Architect, Sir Herbert Baker, A.R.A., F.R.I.B.A. Meet at India House, at 2.45 p.m. **2.45 p.m.**

MONDAY, NOVEMBER 11

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Informal Meeting. **7 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Debate, "Panel versus Direct Heating." This meeting will take place at the Borough Polytechnic, Borough Road, Southwark, S.E.1., 7 p.m. Light refreshments, 6.30 p.m. **6.30 p.m.**

TUESDAY, NOVEMBER 12

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Visit to Carreras Factory, Hampstead Road, N.W.1. Meet at main entrance at 2.45 p.m. **2.45 p.m.**

UNIVERSITY OF LONDON, UNIVERSITY COLLEGE, Gower Street, W.C.1. "Engineering Management." First of a Course of three Public Lectures by Mr. E. T. Elbourne, M.B.E., A.M.I.MECH.E. **6.30 p.m.**

WEDNESDAY, NOVEMBER 13

WESTMINSTER SCHOOL HALL (entrance in Dean's Yard). "My Solo Flight to Australia." By Squadron-Leader Hinkler, A.F.C., F.S.M., R.A.A.F. Chairman, Col. The Master of Sempill, A.F.C. **5.30 p.m.**

THURSDAY, NOVEMBER 14

THE ARCHITECTURE CLUB. Dinner at the Savoy Hotel.

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Science Standing Committee.

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "Woodworking Machinery." By Stafford Ransome, M.INST.C.E. **7.30 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Fourth of a course of eight Public Lectures. "Delos." Dr. Ernest A. Gardner. **5 p.m.**

FRIDAY, NOVEMBER 15

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. "Romance of Lead in Industry." By E. Holden, F.COLL.H. **3 p.m.**

MORLEY COLLEGE, Westminster Bridge Road, S.E.1. "Housing." By E. D. Simon, M P. **8 p.m.**

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Smoke and Health." By John S. Taylor, M.D., D.P.H.

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. At the Town Hall, Carlisle. Sessional Meeting. Discussion on "Town Planning of Built-Up Areas," to be opened by Percy Dalton, A.M.INST.C.E., A.R.I.B.A. **7.30 p.m.**

SATURDAY, NOVEMBER 16

Sunrise, 7.19. Sunset, 4.10.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Informal Visit to Houses of Parliament. Meet at Norman Porch, Victoria Tower, at 2.30 p.m. **2.30 p.m.**

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. At Carlisle: visits to the premises of the Nestlé and Anglo-Swiss Condensed Milk Co., the City of Carlisle New Electricity Works, the New Gas Works, and the new housing schemes of the Carlisle Corporation. Meet at the Town Hall at 9.30 a.m. **9.30 a.m.**

MONDAY, NOVEMBER 18

R.I.B.A., 9 Conduit Street, W.1. Meeting of Executive Committee. 4 p.m. General Meeting, with Paper by Alan E. Munby, M.A., F.R.I.B.A., on "The Design of Science Buildings." 8 p.m. Exhibition of the Work of the late Bertram Goodhue, until November 30. Open daily, between 10 a.m. and 8 p.m., Saturdays 5 p.m. Licentiate Examination to qualify for nomination for Fellowship until Friday, November 22. **4 p.m.**

TUESDAY, NOVEMBER 19

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Ordinary Meeting. **6 p.m.**

WEDNESDAY, NOVEMBER 20

WESTMINSTER CITY SCHOOL, Palace Street, Victoria Street, S W 1. "My Experiences of Magic in West Africa." By Lady Dorothy Mills. **5.30 p.m.**

THURSDAY, NOVEMBER 21

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "Mouldings—Their Proportion and Place in Design." By E. J. Warne. **7 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Fourth of a course of eight Public Lectures. "Delphi." By Ernest A. Gardner. **5 p.m.**

NORTHERN POLYTECHNIC, Holloway, N.7. "Modern Architecture." By Howard Robertson, S.A.D.G., F.R.I.B.A. **7 p.m.**

FRIDAY, NOVEMBER 22

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Smokeless Fuels." By William Gibson, M.SC.TECH.A.I.C. **7 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee.

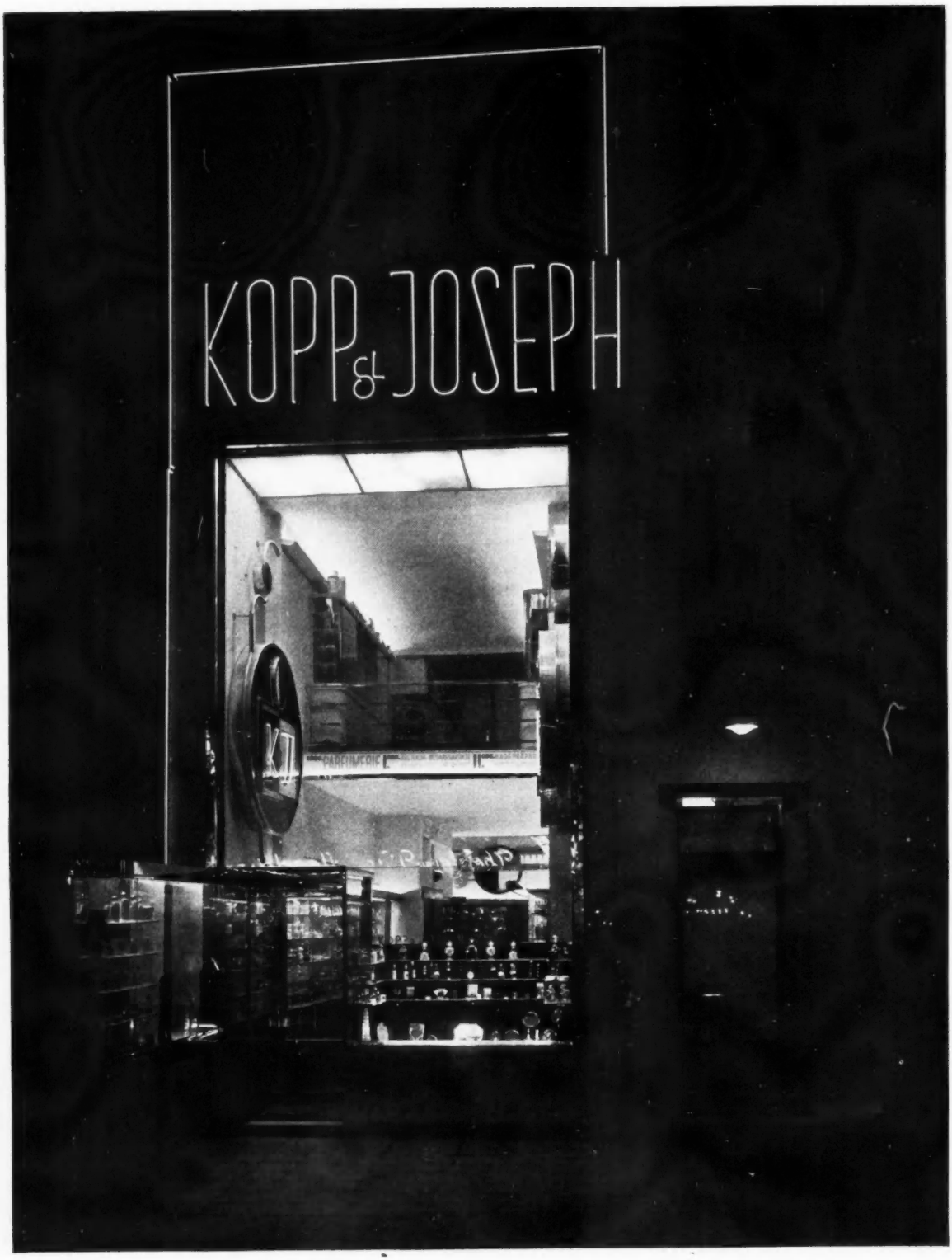
WEDNESDAY, NOVEMBER 27

WESTMINSTER CITY SCHOOL, Palace Street, S.W.1. "By Car From Nile to Niger and Across the Sahara." By Owen Tweedy. **5.30 p.m.**

THURSDAY, NOVEMBER 28

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee.

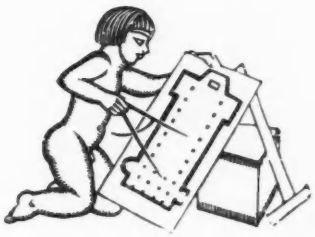
UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Fifth of a course of eight Public Lectures. "Eleusis." By Dr. Ernest A. Gardner. **5 p.m.**



THE GLASS OF FASHION.

An all-glass shop-front, for a perfumery store, designed by A. Korn and S. Weitzmann, on the fashionable Kurfürstendamm of Berlin. The uninterrupted view of the interior, bisected by the bright metal balustrade of the mezzanine, inevitably suggests the cross-section of a ship's engine-room in the stand of an exhibition of marine engineering. This mechanical atmosphere is heightened by placing the neon-light shop-sign—a bizarre parti-coloured dial—just inside the window.

THE ARCHITECTS' JOURNAL



WEDNESDAY, OCTOBER 30, 1929

WHEN THE LIGHTS COME ON

"*Thou com'st in such a questionable shape.*"

—HAMLET, Act I., Sc. 4.

AFTER dark, when the lights come on, the curtain is, as it were, drawn back from a new world. It is, perforce, a world decked out (if we disregard the pale rays of the moon) by man's ingenuity. In the twentieth century we may claim that he has contrived to give to the invention with which he meets his purely utilitarian need of artificial illumination a twist of fantasy. Especially as regards the external lighting of buildings and streets many expedients that are beautiful, and some that are merely arresting, as in the case of the shop-sign illustrated on the facing page, are ready to his hand.

Modern architecture and decoration, in fact, disclose the recognition of forces which for a long period have been germinating and perfecting their growth outside the aura of the body of architecture.

As reinforced concrete can by no means be made to run into Georgian or Tudor channels, it follows that there must arise from the use of concrete, however clumsy, some manner of working peculiar to the material. In the same way many other materials, such as plywood, metals, glass and rubber, each after its kind, are serving to give variety and mobility, depth and character, to a new way of looking at architecture that we call modern.

While reinforced concrete may be said to be the strongest of the newer forces operating upon exterior architecture, interior decoration probably owes more to the stimulus of electric light than to that of any other one agent. Ever since the portable candle gave way to the newer forms of lighting by gas and electricity, decoration has suffered through an undue concentration upon the fixed lighting fitting and from a disregard of the properties of light itself. With gas-lighting, especially, the mechanism and fixed point of supply restricted the field of design and decorative use to such an extent that the gas-light period represents nearly complete artistic stagnation.

Electricity, on the other hand, has proved nearly too mobile, too malleable; for if the gas bracket made little advance from its clumsy mechanical beginnings, the electric light has shown itself capable of being anything. In actual fact, its most successful role has been that of historical mimic. In the form of a candle, it has dodged through every known period of architecture. The catalogues are a perfect mine of second-hand information: Louis XV, Louis XVI, Tudor, Queen Anne, Georgian—for every recognizable period there are electric-lighting fittings to be found. All correctly reproduced, all with their little candle lamps and parchment shades. All quite nice.

On the other hand, electricity has failed, so far, to do the simple things well. Architects know, from these same catalogues, how hard it is to find a good single-bracket light and how hideous are the forms which have been the contribution of electricity—the counter-balanced electrolier and the pendant light.

At the next Ideal Home Exhibition there will be exhibited the results of a competition, instituted by *The Daily Mail* and the General Electric Company, in which modern lighting and the design of simple fittings for normal homes will be combined with the design of a suite of six rooms in the modern manner. The conditions lay special stress upon the relationship between lighting and architecture and decoration.

The competition is certain to produce some interesting schemes for interior decoration and much expensive and beautiful lighting, but if it is unusually successful it will also add something to the too meagre repertoire of the designers of modern fittings, and set the movement in the right direction.

Such an impetus is greatly needed, and its administration in so practical a form is only one symptom of a growing desire on the part of the manufacturers really to guide taste away from what has tired us and them this long time. We have good reason to know that others may be expected to develop.

NEWS & TOPICS

WESTMINSTER ABBEY SACRISTY COMMITTEE

THE Committee appointed by the Dean of Westminster to adjudicate upon the various schemes for the proposed sacristy inspires confidence, and there appears no doubt that it will give impartial consideration to the problem. The choice of Archbishop Lord Davidson and the Presidents of both the Royal Academy and the R.I.B.A. could not be bettered, while the inclusion of Mr. C. K. Peers, the Chief Surveyor of Ancient Monuments to the Office of Works, and Mr. J. F. Green, Acting Chairman of the Society for the Protection of Ancient Buildings, is to be welcomed. There now seems to be only one more formality necessary if the competition is to fulfil its object; and that is a statement from the Dean himself providing a detailed description of the accommodation considered sufficient for the needs of a modern sacristy. Without this the architects who desire to submit schemes will be greatly hampered in their task.

HEATING BY ELECTRICITY OR BY SMOKELESS FUEL?

Concurrently with the announcement that the first contract in connection with the erection of the new Battersea Power Station has been placed, in a vigorous presidential address given at the annual conference of the Institute of Fuel, held at the Institution of Mechanical Engineers, Sir David Milne-Watson raised once more the question of smoke abatement, and he warned his hearers not to expect too much from the national "super-station" for electric power. He pointed out that, admirable as was electricity as a means of transmitting power, as a source of heat there are limits to its thermal economy, and that much delay to progress could be foreseen from excessive attention being paid to electricity, with corresponding neglect of the benefits available from the organization of the carbonizing industries. Therefore it behoves us to think twice before we spoil the countryside by the erection of innumerable standards for carrying wires for the transference of electric current. We cannot be sure that other methods of generating power may not in the future prove more economical, with the introduction of high-quality smokeless fuels free from the objections usually urged against them.

WHY NOT CONCRETE ELECTRIC MASTS?

Incidentally, I quote, *in extenso*, the following from a correspondent: In a recent notice in your JOURNAL's pages of the Oxford Preservation Trust Report for 1928 I noticed that the reviewer asked if the Trust had considered, as an alternative to steel masts for electric current transmission, concrete ones, such as are used in the South of France. Curiously enough, there was a letter in *The Times* of October 8, advocating the same thing and quoting the same region as an example. Surely there must be something in this idea. How is it that this alternative material for masts, obviously less alien to rural amenities than steel—witness the success of the Berwick-on-Tweed and Newtonmore bridges—has received so little attention at the hands of the many correspondents who have been inundating the daily press with letters recently? That concrete can be used for masts in electric current transmission schemes is known; that its appearance is less wounding than steel is asserted by more than one eye-witness—is there then some technical objection to its use which has been overlooked?

TWENTIETH-CENTURY COTTAGES IN THE COTSWOLDS

Every fresh sign that the Council for the Preservation of Rural England is exerting a formative influence upon architecture must rejoice the heart of everyone who realizes its principal object. Unfortunately the beauties of landscape are today more often injured by bad buildings than by any other cause. And nowhere have rural beauties been more villainously defiled than in the Cotswold country, where, cheek by jowl with lovely cottages built in locally quarried stone and expressing a spirit of modesty and restraint, we see the garish products of suburbia, perky little villas decked up in meretricious ornament. It is true that imported bricks and slates may be slightly cheaper than the stone walls and stone roofs of the traditional Cotswold cottage; but both bricks and slates may be grey or of some other quiet tone which would harmonize with the old buildings, while there is no practical reason which need prevent a modern dwelling from showing as much comeliness and coherence in design as did those of the past.

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Some new houses at Avening illustrate this obvious truth; and when the Parish Council of that district were seeking additional accommodation for local inhabitants Mr. F. C. Minoprio, of Avening Court, not only provided a site but offered a sum of money towards the building of the cottages, on condition that they should conform to the standard of the Gloucester Preservation Council. Plans prepared by a local architect were, after consideration and revision, approved, and three blocks of cottages in a new concrete construction, in spite of their twentieth-century framework, are so designed that they are agreeable neighbours to the older buildings in the locality. This result does credit to the tact which must have been exercised by promoters of the scheme and the skill of the architect who was so successful in making new materials subserve an old but still honourable tradition.

THE PRESERVATION OF OLD BATH

As far back as 1909 a number of the finer spirits of Bath formed themselves into a society, the immediate object of which was to circumvent a proposal to destroy the beauty of a street which preserves in a singularly perfect state the impress of the eighteenth century. The centre of the town retains its original and charming identity, thanks only to the efforts of the "Old Bath Preservation Society," for such is this society's most Pickwickian title; and now there comes to me a pamphlet setting forth, to perhaps a more sympathetic public, its present-day aims and objects. "The Old Bath Preservation Society offers no opinion on the relative merits of different styles in architecture; it takes its stand on the simple fact that eighteenth-century Bath is generally admitted to have been as a whole the highest and completest expression of a particular style . . . an essentially English development of Renaissance art . . . and the embodiment of an ideal of town planning unsurpassed, if indeed equalled, anywhere . . . but we cannot at the same time destroy the parts and preserve the whole." The pamphlet then goes on to tabulate the good features of colour, form, material and design; followed by the elements of destruction which it is the purpose of the society to detect and eradicate from the picture. All this is simply and sensibly put down as a guide to a body of lay opinion, which in these years is going to prove more useful in the cause of civic beauty than any other section of society.

A WIN FOR COPPER WATER PIPES

My compliments to the Kingston-on-Thames magistrates for allowing common sense to shake rudely the absurd position taken up by the Metropolitan Water Board, in regard to copper tubes for domestic water supply. For having refused water to a suburban householder on the ground that a light gauge of copper tube had been installed in his house, they were fined £2 and fifty guineas costs. It should scarcely have needed the evidence of the expert from the National Physical Laboratory to make it clear that '18- or 19-gauge copper tube will stand a higher pressure than the lead pipe which the Board consistently permits. The contention that because lead has the greater expansion it is safer against the bursting effects of frost shows a curious limitation of knowledge. If expansion from freezing and thawing constituted a solitary experience in the life of a water pipe, there might be something in the idea. Since, however, the elasticity of lead is negligible, despite its high ductility, it requires merely the recurring frosts of one severe winter to stretch a lead pipe to a dangerous thinness. Drawn copper, on the other hand, while possessing less ductility, has a very definite elasticity. Its high tensile strength, also, places it in a very different category from lead. It is curious that huge quantities of welded-iron water tube are accepted by the Metropolitan Water Board without question, despite the fact that it is no uncommon experience for one sharp frost to burst the welded joints, often for feet on end. Drawn copper tubes today are probably more consistently regular in structure and strength than any form of conduit which is available and suitable for domestic water supply; and repairs, in the event of damage, particularly during frosty weather, are much more expeditiously carried out than in the case of either iron or lead.

A GREEN BUILDING STONE

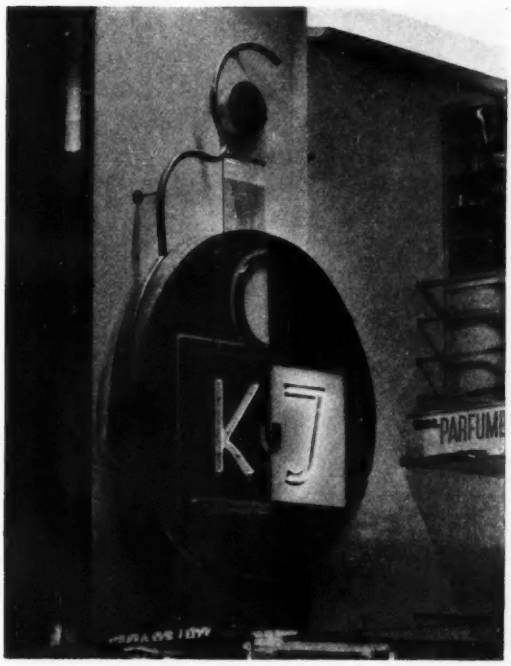
Green-veined marble or serpentine is a familiar enough decorative material for shop-fronts and hall pavements. Bands of a green New Zealand marble, that has now weathered into a rather dirty grey, occur between courses of Portland stone on the façades of the Gaiety Theatre. A correspondent informs me that a small war memorial stele of Runic design, recently erected at Bowness on Lake Windermere, has been built of what appears to be a green stone of a perfectly uniform colour somewhere between apple- and sage-green. The stone is dressed and squared in the usual manner and shows a remarkably smooth, close, and even-grained texture, which readily lends itself to carving. He adds that several new houses have been constructed at Keswick with quoins and window surrounds of this same stone, and that the effect of this pure and beautiful shade of green is particularly charming.

★

No doubt the stone in question is the celebrated Buttermere slate, quarried in thick blocks instead of being split into thin roofing slabs. Slate, indeed, is far too little used as a variant masonry material, as which it is eminently suitable if of not too friable a kind. London has so much need of borrowed colour in its long winter drabness that the experiment of using blocks of this green Westmorland slate-stone for details like voussoirs seems well worth trying. Lake District green stone must not, however, be confused with "greenstone," that peculiarly ugly Irish soapstone, looking like congealed viridescent seaweed, which used to be shaped into primitive little "lucky pig charms" for ladies' bracelets in far-off pre-war days.

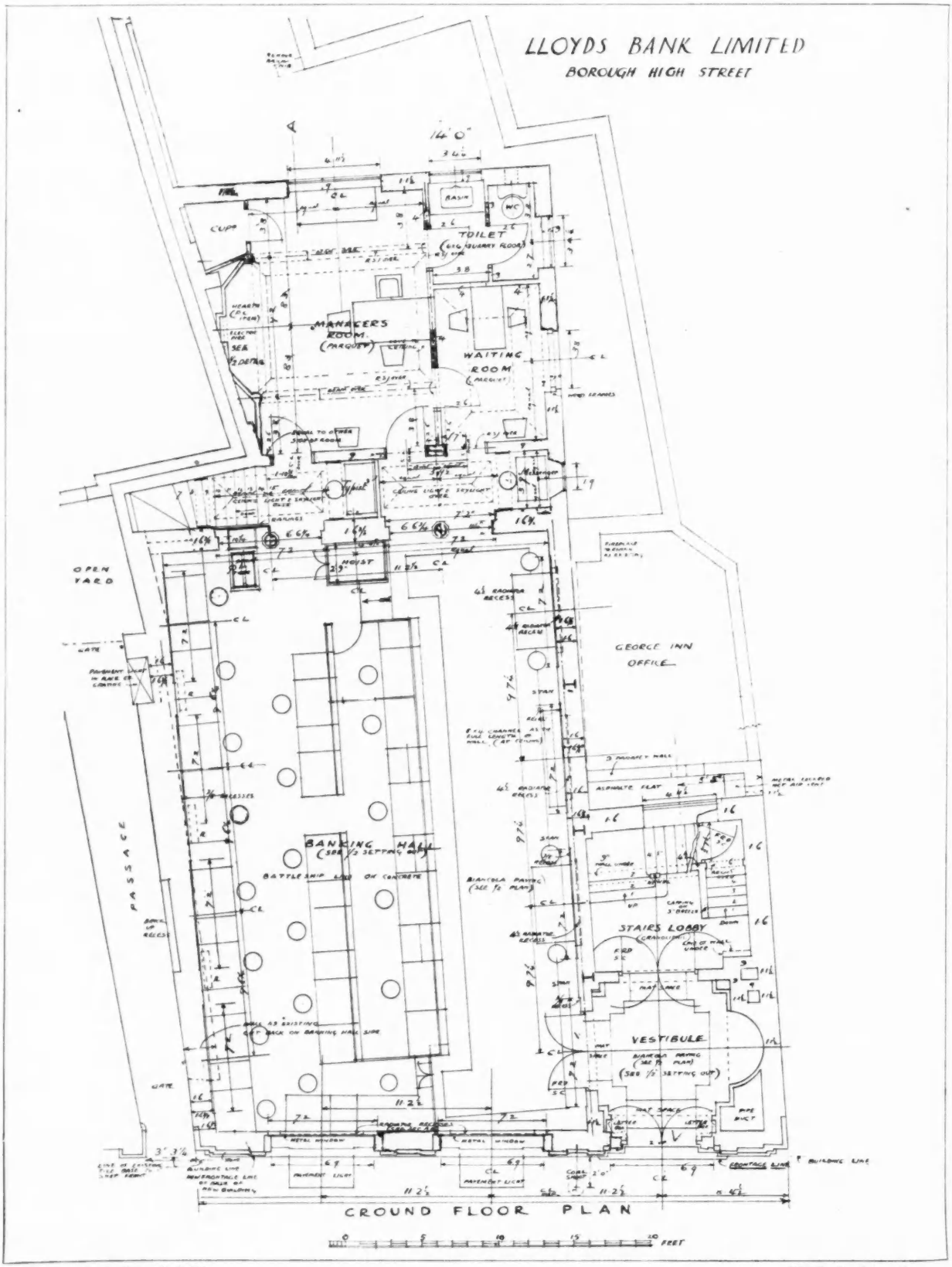
THE TELEVISION STYLE

Until the law allows two- or three-shift days in the big stores, early-closing regulations will continue to condemn shop premises to remain dormant capital for anything between twelve and sixteen hours out of the twenty-four. By turning the shroud of darkness into a magic lantern screen, neon lighting can recover, by a kind of mercury vapour process, much of the valuable by-product of "higher salesmanship," known as shop-window publicity, that would otherwise be lost. The shop-front for a perfumery store, by Herren A. Korn and S. Weitzmann, on the Kurfürstendamm of Berlin, is surprisingly inconspicuous in a street of architectural adventure by day, and has been designed for the most effective display by night. In deference to the now sacrosanct dogma of "no more façades," it has been made to "show its works" to an almost embarrassing extent.



Not the headlight of an American locomotive, but a German shop-sign. It is hung, not outside the front, but inside the window (see also frontispiece).

The "touching up" of the deliberately neutral background with neon lighting at dusk is apparently intended to act as a hypnotic reminder to ladies that their complexions need to be more hectically composed after nightfall; and that all the latest cosmetics for this important plastic ritual can be obtained within. One of the newest and most expensive French perfumes has been given the evocative name of "Volt." It would be an insult to the modernity of Messrs. Kopp and Joseph to believe that they sold any but synthetic scents. A novel feature of their shop-front, a view of which the editor has decided to reproduce as the frontispiece to this issue, is the neon-light shop-sign, illustrated above: a curious parti-coloured dial, placed not flush with or surmounting the window, but just inside and at right angles to it. The eye is prepared for this unusual position by the way in which an external showcase, in alignment with the shop sign, is protruded on to the pavement: a device now enjoying a considerable vogue in Germany. ASTRAGAL

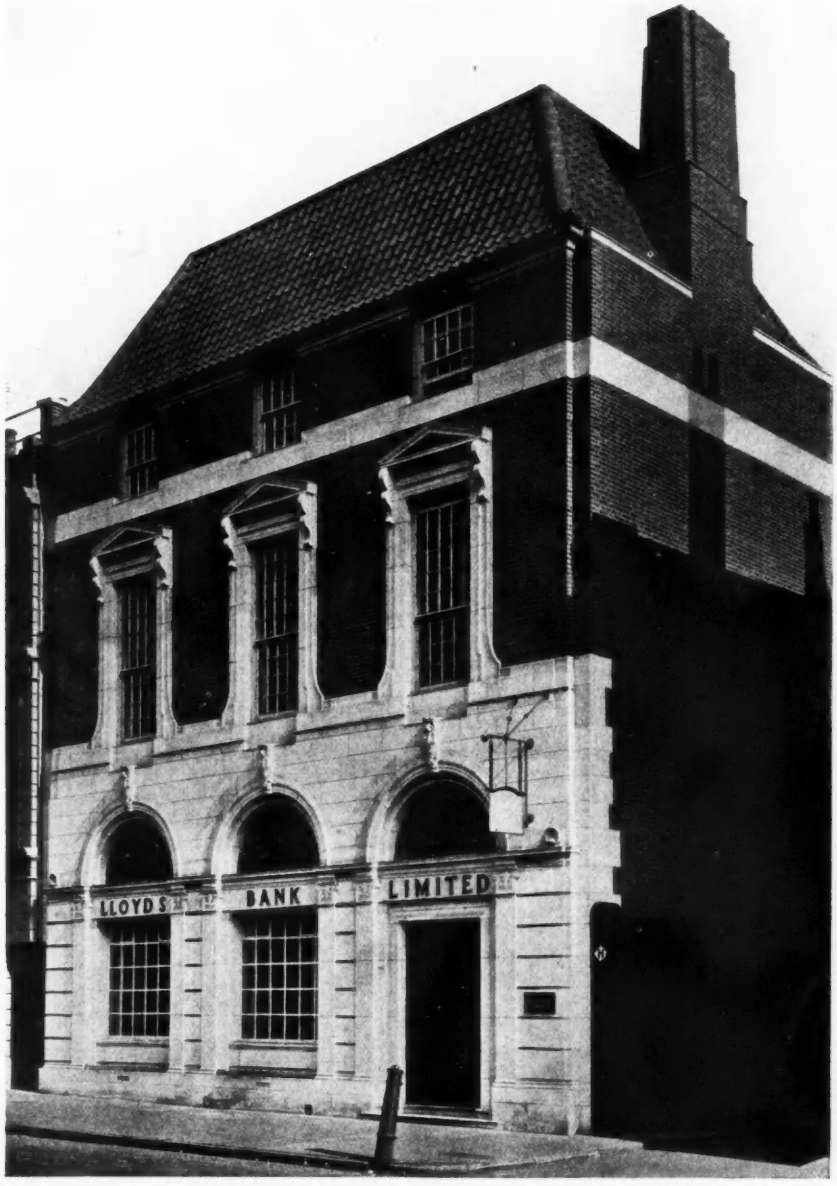


Lloyds Bank, Borough, S.E.] [*By P. D. Hepworth.*

The architect's ground-floor plan of Lloyds branch bank in Borough High Street, S.E., which is illustrated and described on the facing and subsequent pages. The site is roughly a rhomboid, encroached upon by existing buildings. Advantage has been taken of the corner space left by one of these to form an entrance vestibule.

BRANCH BANK IN THE BOROUGH S.E.

DESIGNED BY P. D. HEPWORTH



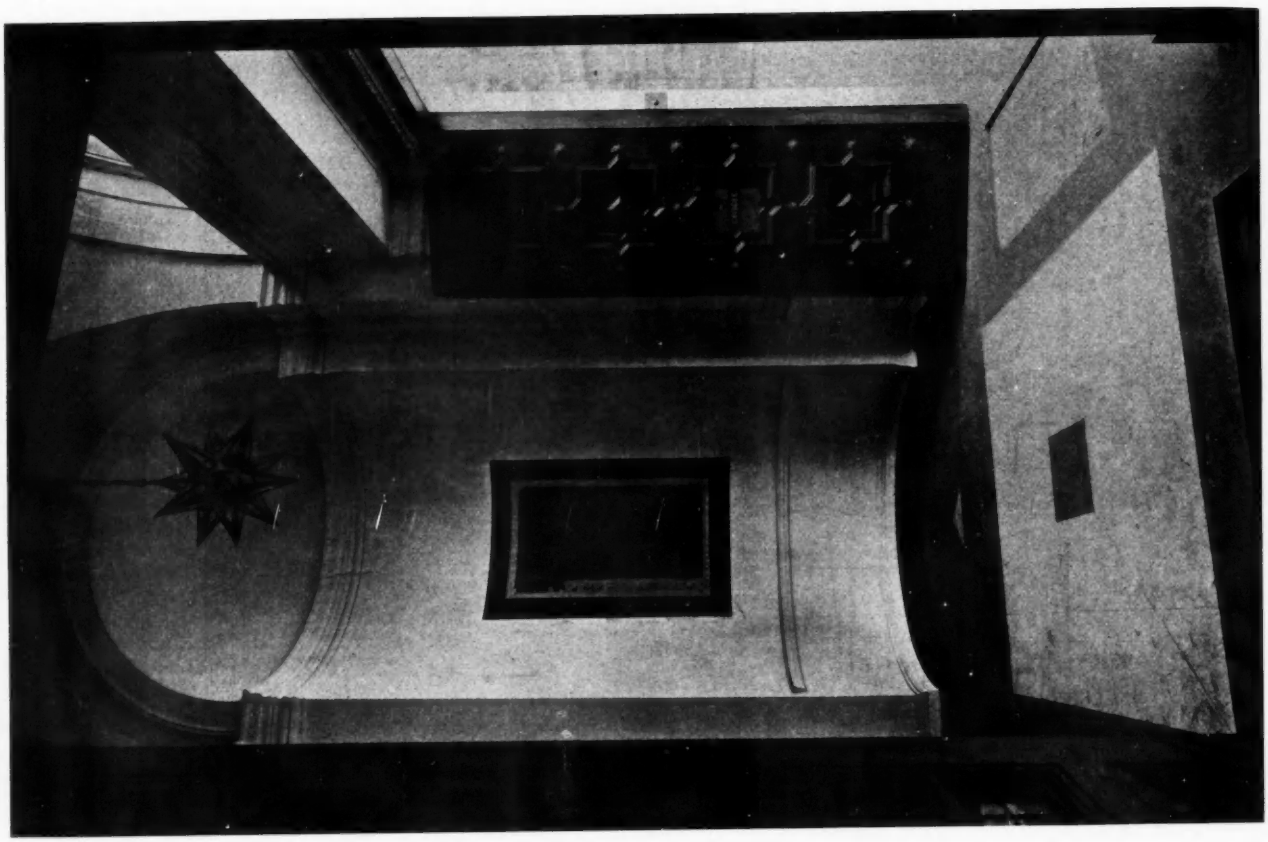
The front to Borough High Street. The yard seen on the right leads down to the famous old George Inn, which was well known to Charles Dickens.

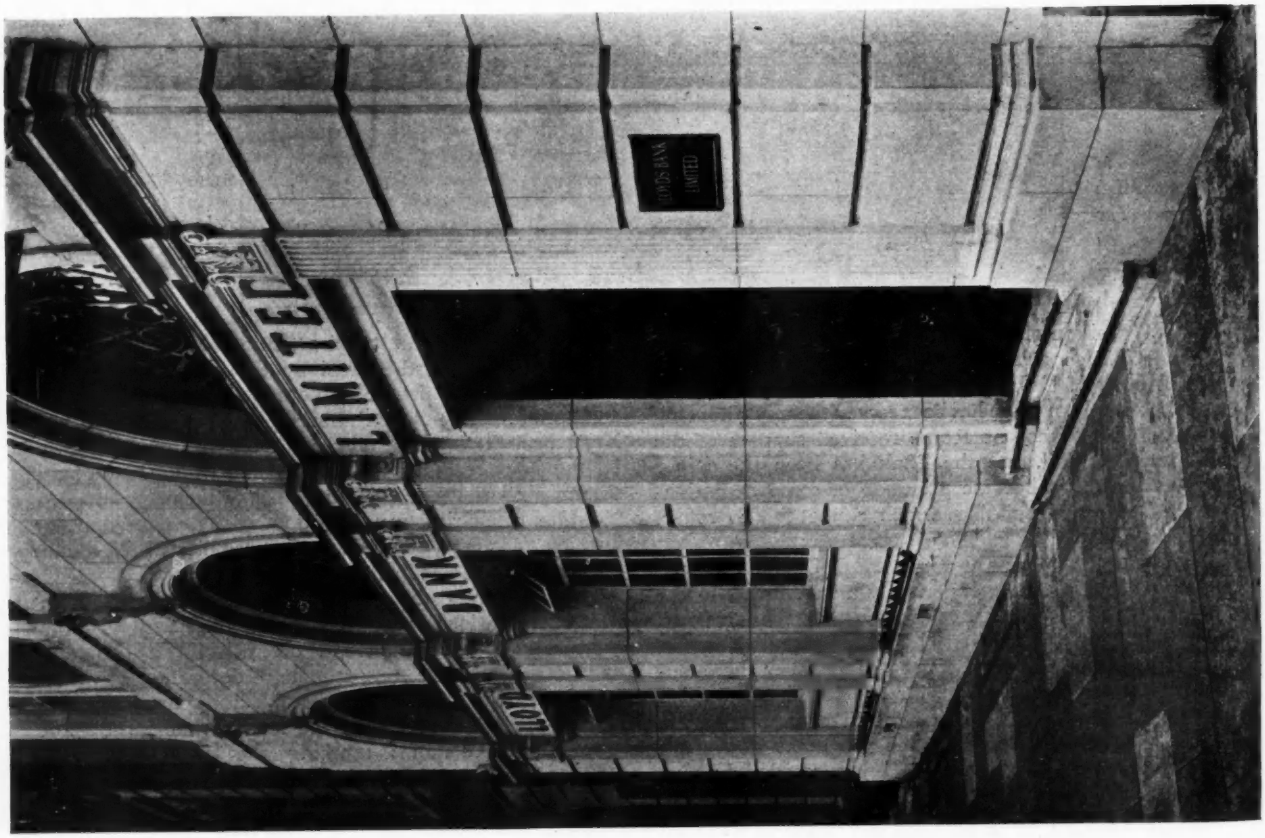
THE decision of the directors of Lloyds Bank to commission as architects of bank buildings a certain number of Rome Scholars has proved a very wise one, for a double purpose has been served thereby ; not only has the British School at Rome received support of the most practical kind, but the Bank has been the gainer inasmuch as it has become possessed of some exceptionally well designed buildings which cannot fail to reflect credit upon itself.

The latest example at Borough High Street, designed by Mr. P. D. Hepworth, is certainly an ornament to the locality where it is placed and proves that the façade of a branch bank provides excellent opportunities for an architect with imagination. Yet the problem here encountered is not an easy one, for the premises in which the business of the bank is conducted occupy only the ground floor and basement, while the floors above are sublet as offices. Mr. Hepworth has succeeded in preserving the unity of the façade, but at the same time he gives to the bank itself the requisite architectural prominence. The fine trinity of round-headed windows, set in a stone surround, attracts attention immediately, and this attention is further held by the intellectual quality of the ornament which he employs to elaborate his original conception. The façade above, predominantly of brick, is yet brought into harmony with the ground-floor story by the stone facings which enable the windows to claim a family relationship with those below them. The steep pan-tiled roof strikes a note of domesticity, which appears justified as soon as one realizes that room has been found for a caretaker's flat in this topmost story.

The interior of the building shows careful design, in which the various apartments are treated with just the right degree of architectural ceremony. The banking hall itself is an interesting scheme of decoration in which a series of lunettes, partly windows and partly mirrors, lighten the upper section of the room, while the pair of spirally-fluted columns marking the entrance to the manager's office add a welcome touch of unconventionality to the composition. The detail throughout is well studied.

A. T. E.




LIMITED
BANK



A near view of the exterior, which is carried out in Portland stone. The features of this ground floor are three similar arches, having carved keystones, filled in with semicircular fanlight grilles, above fluted pilasters with carved capitals; two are windows, and the other the main doorway.



Inside the entrance vestibule, looking towards the double street doors, both of which are open. The upper floors of the building being intended for separate occupation as offices, a direction plate has been specially designed to fit into, and harmonize architecturally with, the semicircular alcove.



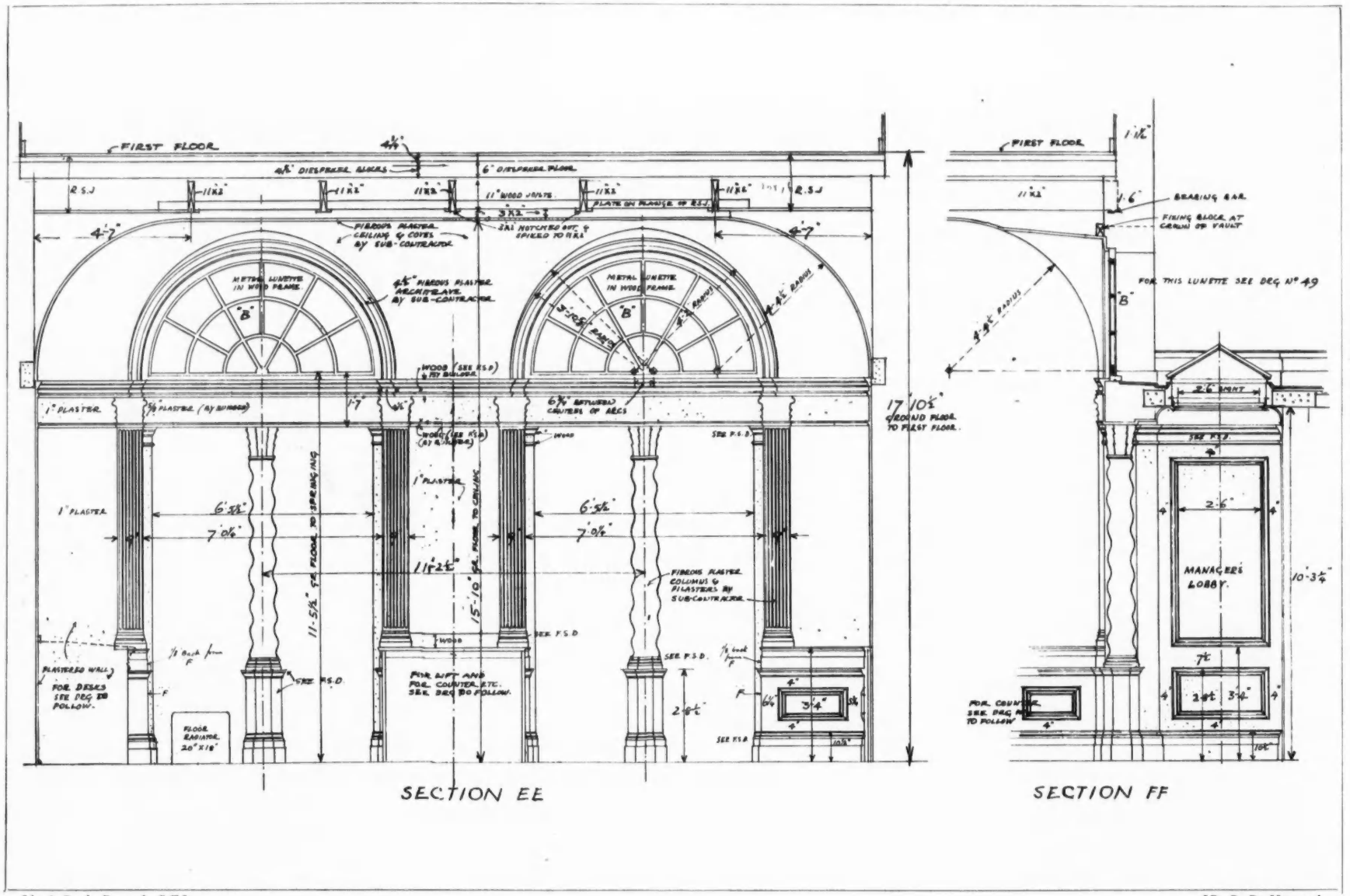
Lloyds Bank, Borough, S.E.]

Inside the banking hall, looking towards the street front: the doorway is at the far end of the left wall. The vaulted ceiling, regularly broken by the semi-circular-headed lunettes, gives it a distinctive character. Those that do not admit light are fitted with mirrors. The dado is of teak panelling: the pairs of pilasters, with enriched capitals, are in pale blue; the surfaces between, in cream.



[*By P. D. Hepworth.*

The reverse aspect of the banking hall has its arresting details in the spirally-fluted columns, orange-coloured on brown pedestals, that mark the boundary of a transverse lobby, beyond which are planned, with due sense of mystery, the manager's room and that set apart for the accommodation of his waiting clients. The desks and counters are of teak; the floor covering is in black and white.



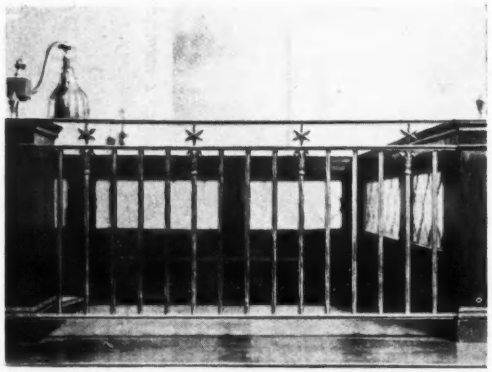
Lloyds Bank, Borough, S.E.] [*By P. D. Hepworth.*

A reproduction, reduced in scale, of the architect's half-inch detailed drawing of the arcade, with fluted supporting columns, dividing the banking hall from the lobby giving access to the manager's and waiting rooms. The portion of the drawing on the right shows the lobby itself, in half-cross-section, together with details of the panelling.

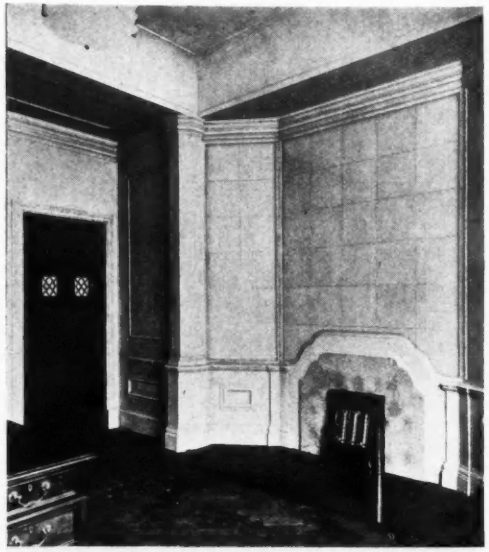


Lloyds Bank, Borough, S.E.]

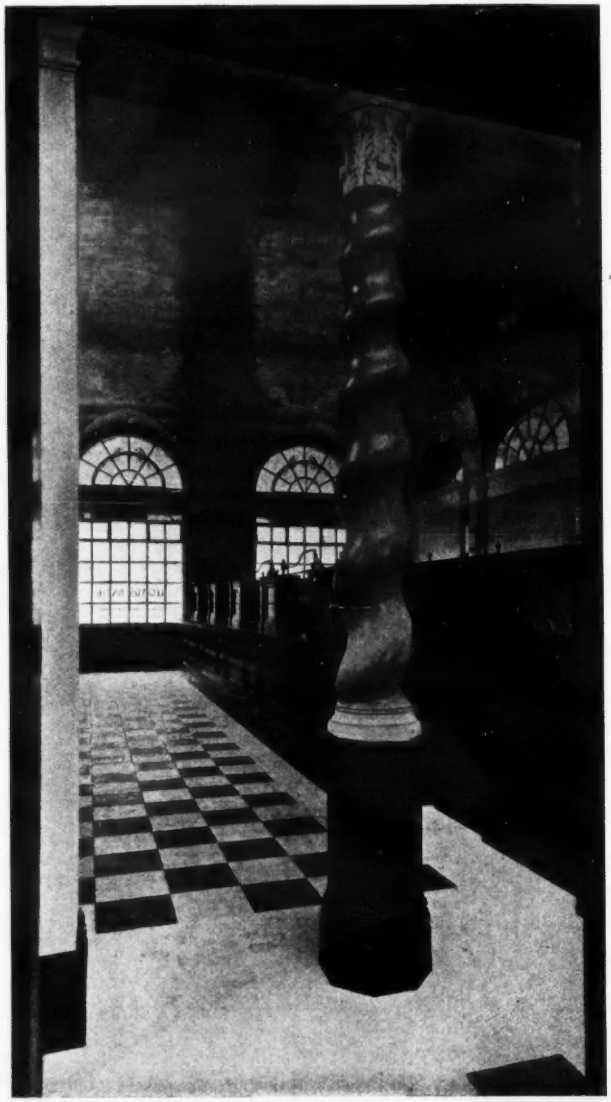
A photograph of the main entrance, taken to show the details of the moulding on the folding doors, which are of wood, each carrying four deeply-cut panels, with bosses.



One of the metal desk grilles : accommodation at the counter is provided for four cashiers.



In the manager's room, a shallow recess has as its focal point an electric fire in a specially designed setting. The doorway has an enriched moulding.



[*By P. D. Hepworth.*

One of the spirally-fluted columns, with carved capitals, appearing in the drawing reproduced above, taken at close quarters. Beyond it is seen the vista of the banking hall.



The new School of Geology, formally opened by Mr. Stanley Baldwin, M.P., last week, has been erected as a memorial to the late Lady Herdman, who, jointly with her husband, Sir William Herdman, founded the Chair of Geology.



The main entrance. The façades are of 2½-in. sand-faced bricks; the entrance and dressings are of Portland stone.

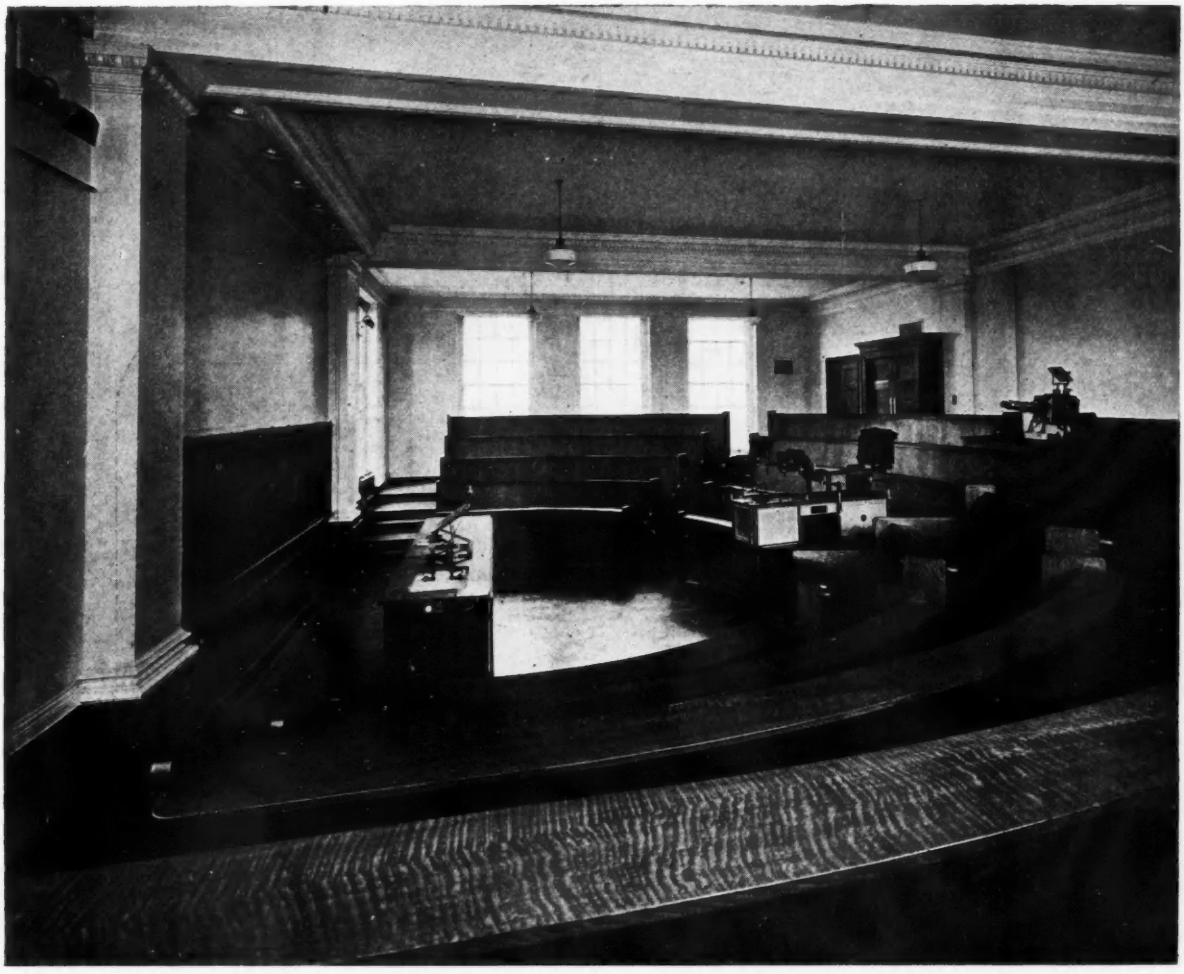
UNIVERSITY OF LIVERPOOL

DESIGNED BY BRIGGS

THE new geological laboratories for the University of Liverpool, formally opened by Mr. Stanley Baldwin, M.P., last week, have been built as a memorial to the late Lady Herdman, who, jointly with her husband, Sir William Herdman, founded the Chair of Geology. Sir William was professor at Liverpool for forty years, and Derby Professor of Natural History in the University from 1881 to 1920. Until his death, in 1924, he was a member of the Council. For over twenty years he was secretary of the British Association.

On the death of Lady Herdman, in 1922, Sir William added to his earlier munificent gifts to the University a sum of £20,000 towards the cost of the new geological laboratories. The further funds necessary were provided through the generosity of his family and of other friends in Liverpool.

The new school occupies a site at the corner of Brownlow Street and Pembroke Gardens, and is four stories high. It is designed with the main façade to Brownlow Street, from which the principal apartments are approached through a Portland stone entrance. Extending the full width of the building at the rear is a yard, wit-



On the first floor is the lecture room, which is approached from a large central hall immediately above the entrance hall. Semicircular planned seating is provided on a raked floor to enable students plainly to hear and see the lecturer.

SCHOOL OF GEOLOGY

AND THORNELY

an inclined way down to the basement. Access to this yard is obtained through a pair of gates in Pembroke Gardens. Externally, the building is faced with 2¼-in. sand-faced bricks, with Portland stone dressings.

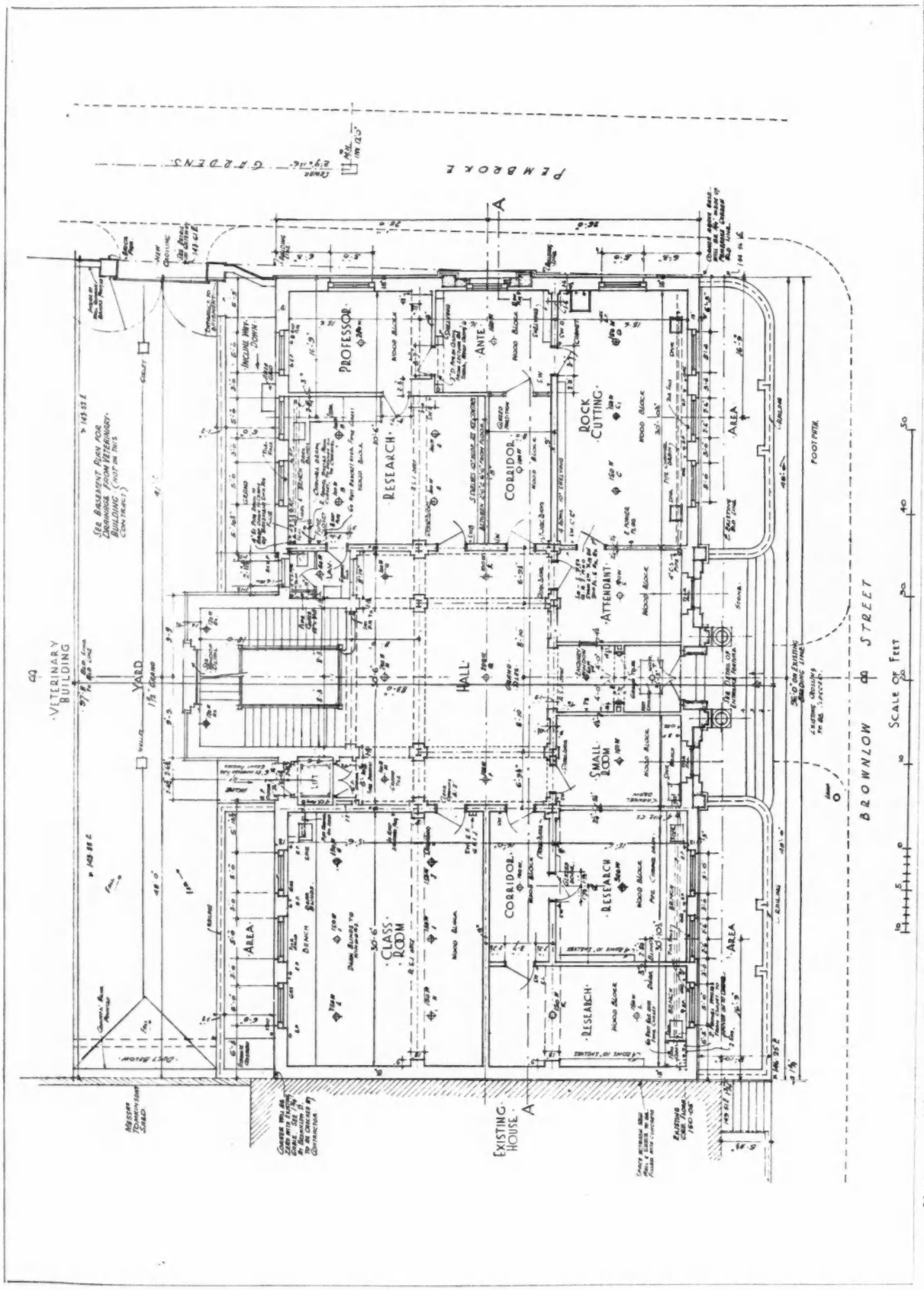
The main entrance leads to a spacious hall. This occupies the centre of the upper ground floor, and contains a bronze memorial tablet to the late Lady Herdman. Other accommodation on the upper ground floor includes the professor's room, private laboratory, secretary's room, a large rock-cutting room, map and research rooms. The map room is equipped as a subsidiary lecture-room, and, moreover, serves as a drawing office. One of the research rooms is specially fitted for rock-analysis and chemical work

On the first floor is a central hall similar to that below, flanked on one side by the lecture room and on the other by the library.

On the second floor the central area is occupied by the museum, with a balcony surrounding its upper part at third-floor level. On the second floor, also, are laboratories for petrological and palæontological work respectively.

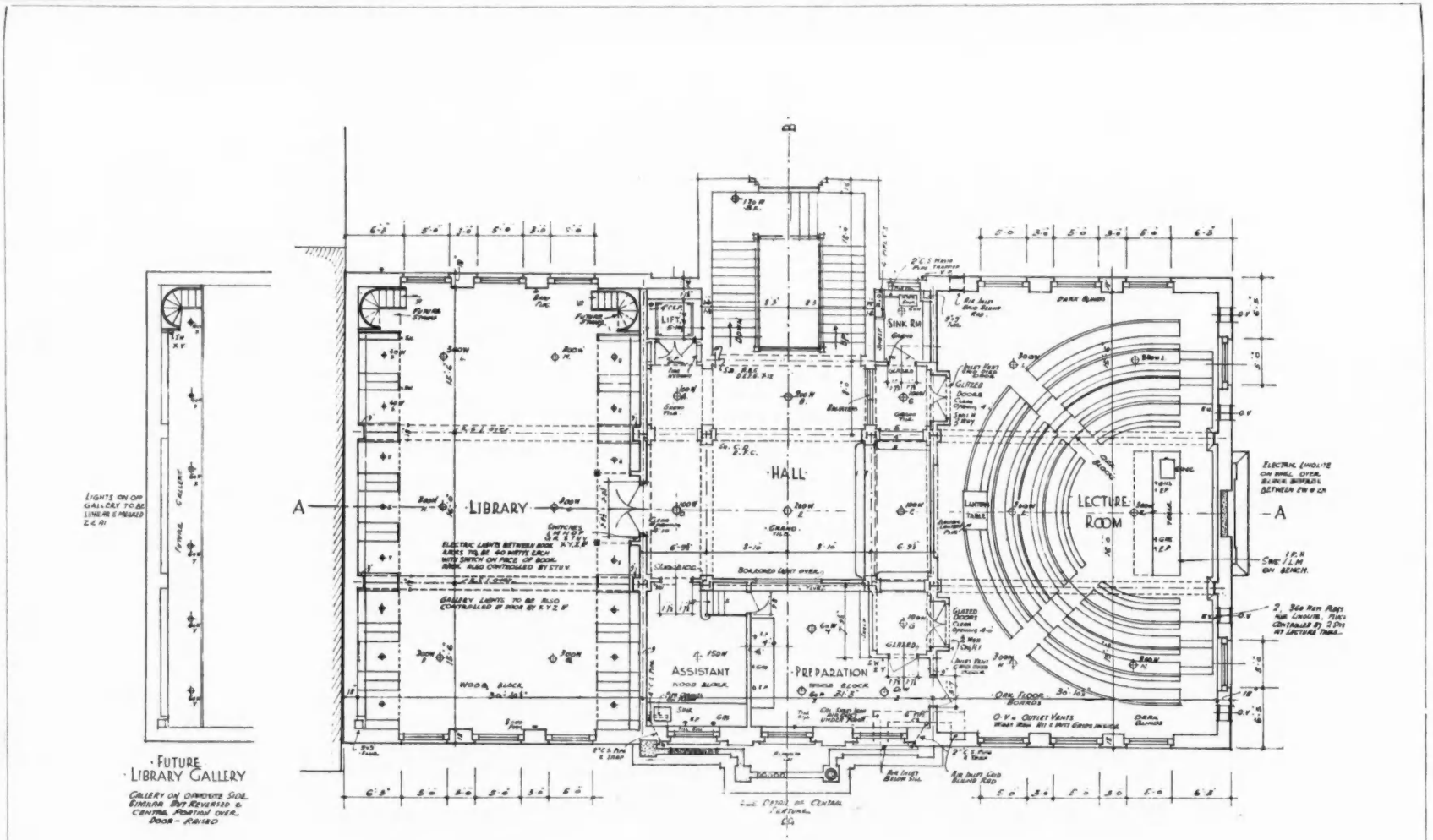


The entrance hall occupies the centre of the ground floor, and contains a bronze memorial tablet to the late Lady Herdman.



Upper ground-floor plan. The building is four stories high. On the lower ground-floor are the library and other storerooms, lavatories, two optical laboratories, a photographic dark room, and, in a constant temperature chamber, a concrete block designed to support earthquake-recording apparatus.

a photographic dark room, and, in a constant temperature chamber, a concrete block designed to support earthquake-recording apparatus.



Liverpool School of Geology.] *[By Briggs and Thornely.*

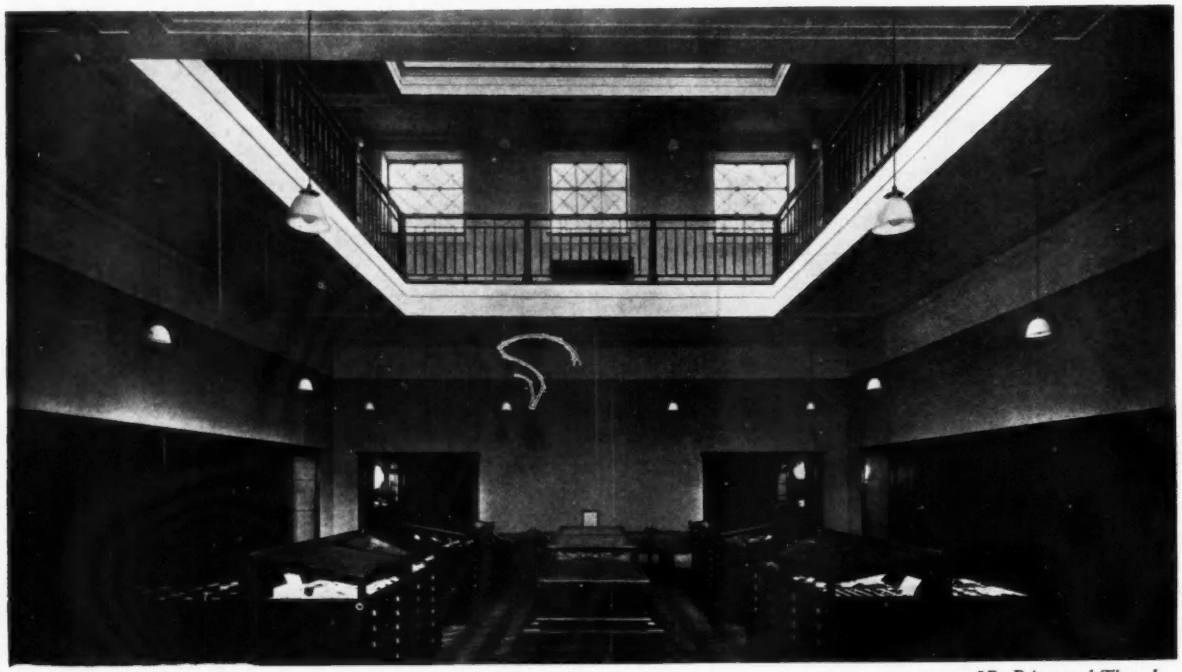
First-floor plan. On the second floor are the museum, which is planned immediately over the central space on the first floor, and laboratories for petrological and palæontological work. The flat roof at third-floor level is specially designed to take a further story if and when required.



The library on the first floor is on the right-hand side of the central hall, in close proximity to the lecture theatre (page 639).

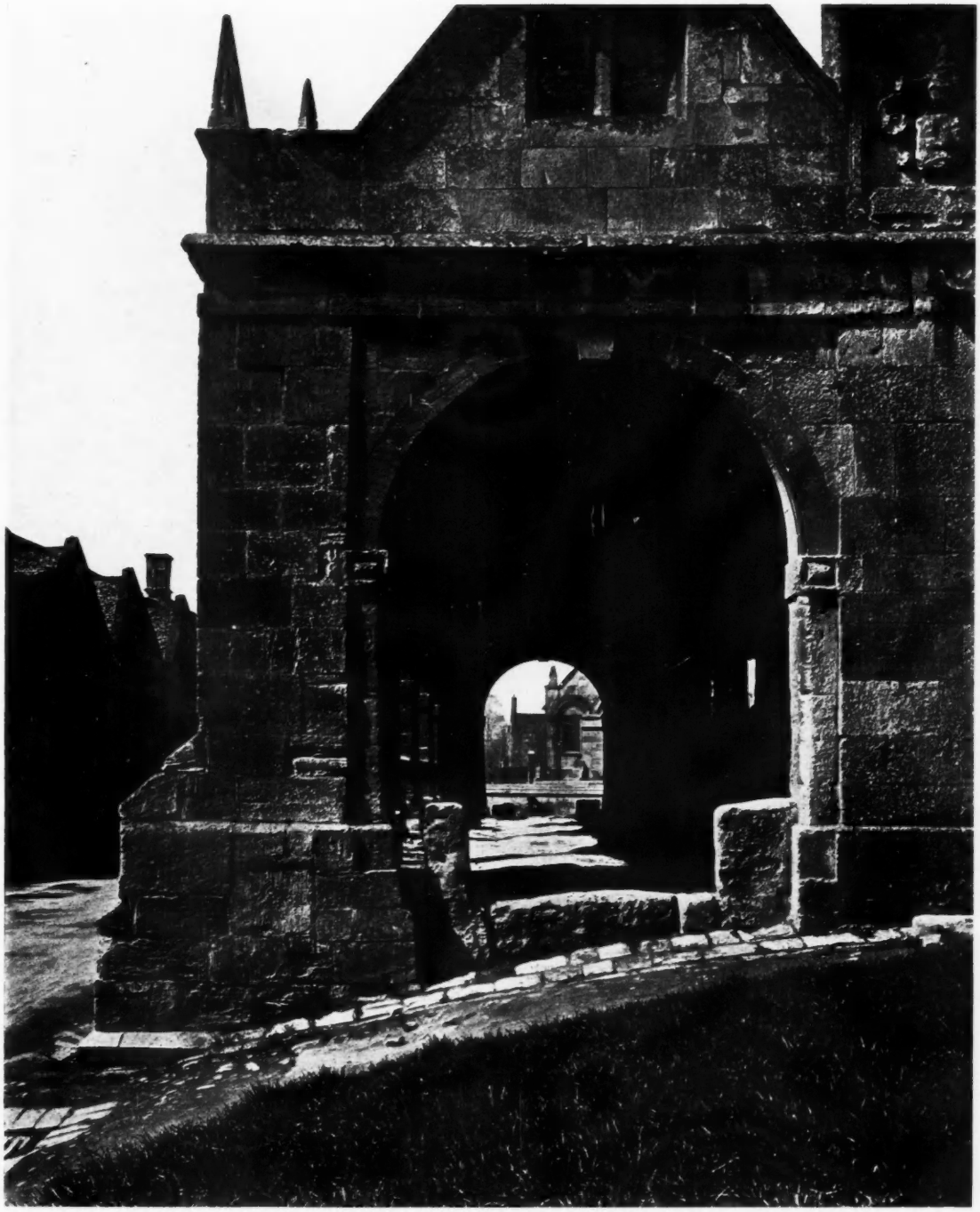


The central hall on the first floor, looking towards the staircase and the doors leading to the lecture room.



Liverpool School of Geology. [*By Briggs and Thornely.*

The museum on the second floor has a gallery, at third-floor level, to which it is connected by a spiral stair.



ENGLISH PRECEDENT No. 88

MARKET HALL, CHIPPING CAMPDEN, GLOUCESTERSHIRE

Erected in Charles I.'s reign and built of the beautiful Cotswold stone, this is one of the finest old stone market halls in existence. The illustration shows one of the two archways of the eastern end, over which there are three stone gables. Each side of the market—i.e. northern and southern—has five archways similar in design.

The simplicity of the mouldings and boldness of the design add greatly to the general effect. The roof carpentry, with its curved oak framing, supported on massive stone columns, forms an object lesson in design.

—[C. M. C. ARMSTRONG.]

THE HONEYWOOD FILE

BY KARSHISH

XXV: Wrangles and Jangles

Grigblay, the builder, is pushing on with the finishing. The contract date for completion is December 11, and Spinlove, the architect, has told Sir Leslie Brash, his client, that it may be possible for him to occupy the house by the end of January.

SPINLOVE TO TINGE (QUANTITY SURVEYOR)

Dear Mr. Tinge, 1/12/25

While I was away on a holiday my client obtained tender for £1,350 for a block of cottages from a new builder, Nibnose and Rasper, which he accepted. He has now decided not to build, and the contractors ask 7½ per cent. on the tendered price as compensation for breach. Is this a fair claim? The firm states that 7½ per cent. represents their expected profits. Is this right?

Yours truly,

TINGE TO SPINLOVE

Dear Sir, 2/12/25

Seven and a half per cent. is about right for profits.

Yours faithfully,

Tinge, as usual, keeps strictly to facts. It is for Spinlove, and not Tinge, to decide whether the claim is a fair one. All Tinge will say is that 7½ per cent. is a reasonable estimate of profits.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 3/12/25

I enclose copies of my letters to Nibnose and Rasper and of their replies. The amount they claim is about right. I will make an appointment with Mr. Nibnose and agree the best terms I can get. Yours sincerely,

We must suppose that Spinlove explained to Brash, when he decided not to build the cottages, that "Nibrasp" could claim compensation; but he does not appear to have any authority to agree the amount, and although 7½ per cent. may represent expected profits it does not follow that "Nibrasp" could enforce a claim for them.

SPINLOVE TO NIBNOSE AND RASPER

Dear Sirs, 3/12/25

Sir Leslie Brash could not foresee the circumstances which now make it impossible for him to build, and he is aware that he is liable to you for compensation; but there are special circumstances which have to be considered in settling the sum to be paid, and I think it would be satisfactory if Mr. Nibnose could call at my office to agree the figure. If you will ring up I shall be glad to make an early appointment.

Yours faithfully,

Spinlove, as agent, here pledges Brash to pay compensation. Even if Brash had agreed to pay—and it does not appear he has ever done so—it was a serious error in diplomacy on Spinlove's part to tell "Nibrasp" this. He should have opened negotiations by saying that his client resented paying compensation, and that unless "Nibrasp" substantially reduced the amount of the claim they would get nothing.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 4/12/25

On my return to the office this evening I found your telephone message telling me to come to no understanding with Nibnose and Rasper until I had seen you. I am sorry to say that I wrote to them last night in the sense of my letter to you. I enclose copy of the letter. You will see that the amount of compensation is left open so that this may be merely a nominal figure.

Yours sincerely,

We have here another example of the ineptitude which overtakes Spinlove when he gets away from the actual business of building. How can "Nibrasp" be put off with nominal compensation—nominal standing for "in name only"—when the payment of actual compensation has been promised?

BRASH TO SPINLOVE

Dear Mr. Spinlove, 5/12/25

I was astounded to peruse your communication to Messrs. Nibnose and Rasper, in which you take it upon yourself to engage me to disburse compensation without any kind of authority from me to do so, and in face of my emphatic objection, expressed to you in verbal conversation some weeks ago, to do anything of the kind. If anyone is to pay compensation I apprehend it is Mr. Snitch for selling me sham bogus plans and preparing documents which you tell me are incomplete and which Messrs. Nibnose and Rasper knew to be incomplete.

It is obvious that I am being robbed and swindled by a pack of extortionate rogues, and that so far from doing anything to protect me you are—if you will permit me to say so—actually playing into their hands. However, one thing is definitely certain: I will not pay Nibnose and Rasper, or Snitch, or any jack one of these scoundrels a halfpenny; and you can tell them so with my compliments. Mr. Snitch has now very obligingly offered to charge only ten guineas "to cover expenses" for cheating me; and if Nibnose talks any more about compensation I request you to refer him to Russ and Co., for I will fight these rogues if I have to sell everything I possess to do it, before I will pay them a farthing.

Yours sincerely,

Ease off on the kidney omelets, my good sir, and walk to the station of a morning! It is true that Spinlove was at fault in pledging his client without written authority, or without a written note of oral instructions the wording of which his client has approved and which he has confirmed to his client; but he seemed to have no doubt that he has correctly represented his client's views, and in any case Brash's claim against Snitch for fees paid, and "Nibrasp's" against Brash for compensation, is entirely due to action taken by Brash without his architect's advice or knowledge. Spinlove has, indeed, rescued his client from a much worse disaster.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 6/12/25

I much regret that I should have wrongly interpreted your wishes, but when some weeks ago I told you that Nibnose and Rasper were entitled to compensation you made no comment, and I clearly understood you accepted the situation. I have today written to the firm repudiating their claim; at the same time there is no doubt they can enforce it. Mr. Nibnose is coming to see me and I will get the best proposals for settlement I can.

May I remind you that I had nothing to do with your contract with Mr. Snitch nor with your contract with Nibnose and Rasper, but that I have spent a good deal of time in trying to get matters arranged in your best interests?

Yours faithfully,

Spinlove's nerves are not, this time, involved.

SPINLOVE TO NIBNOSE AND RASPER

Dear Sirs, 6/12/25

I confirm appointment with Mr. Nibnose at this office at 11 on Thursday.

I regret to have to say that in conveying that Sir Leslie Brash was willing to compensate you, I misinterpreted what I understood to be my client's views. I am now directed by Sir Leslie Brash to inform you that he does not agree you have a claim for compensation against him.

Yours faithfully,

But they have! All Brash does is to roar—"I won't pay!"

SPINLOVE TO GRIGBLAY

Dear Sir, 7/12/25

May I ask you whether you are aware of what is going on at Honeywood? When I was in one of the bedrooms yesterday with your foreman, there was a sudden uproar downstairs; and while I was asking Bloggs what all the noise was, a rat with a terrier after it ran into the room and bolted into the floor space where the electricians had a trap open, and men came rioting up the stairs before they could be stopped. I had noticed several dogs tied up, and Bloggs said the men brought

them "for a bit of a rat hunt in the dinner-hour," but I never supposed there were *rats in the house*.

It is really disgraceful, and I should certainly have to ask you to replace your foreman if the work were not so nearly finished. Suppose Sir Leslie learnt what was going on, or that Lady Brash saw a rat! The rats have no doubt been brought in by the bits of food among the litter in the den which the plumbers used as a shop; but the men have no business to bring food into the house at all. It must be stopped, and the rats cleared out, at once. Bloggs says they will go when they cannot get water; but I have heard of them gnawing through lead pipes for it, and with all these spaces under the floors on the south side, the house will become rat-ridden before it is finished. I shall want to see those spaces thoroughly cleaned out. There are shavings and rubbish there. The main thing is to get rid of the rats at once. Poison must not be used or we shall have more *smells*. I am astonished you should allow such a state of affairs.

Yours faithfully,

PS.—We put the terrier into the floor and got the rat.

From this postscript we learn that the august architect pocketed his indignation and joined the hunt.

GRIGBLAY TO SPINLOVE

Dear Sir, 9/12/25

We regret the occasion for your letter which we were quite unaware of. We are sending down an expert who will fume out rats, and have given our foreman strict orders and trust you will have no further grounds for complaints.

We should like to call your attention to the Riddoppo paint next time you are on the site, as our foreman painter is not altogether satisfied.

Yours faithfully,

BRASH TO SPINLOVE

Dear Mr. Spinlove, 8/12/25

I have to solicit your condolences and ask you to make excuses for the somewhat rough asperity of my last communication, as I was at the time suffering from a dental relapse in a molar which has proved unexpectedly refractory, and you will be sorry to hear me say that the distress was extremely chronic. [*No doubt Spinlove will be sorry to hear him say it; but then—why say it?*]

Messrs. Russ and Co. are dealing with Mr. Snitch. With reference to Messrs. Nibnose and Rasper, I apprehend that you have noted my asseveration that I have given you no authority to agree any sum in disbursement for compensation. At the same time I desire you to proceed with negotiations directed to determining what amount will satisfy these people's demands. The proposal must then be submitted for consideration to Mr. Russ.

Yours sincerely,

Here is a return to sanity.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 10/12/25

I am very sorry to know you have been so poorly and hope you are all right again now.

I saw Mr. Nibnose today. He is hurt at the way he has been treated and was inclined to be stiff; but he is a fair-dealing man and, of course, I had plenty to say of the irregularity of the contract arrangement. Finally he agreed to accept £25 in full settlement as a "friendly compromise," on the understanding that if the money is not paid within seven days his offer is to be deemed to have been refused.

I did full justice to your views, but was only able to lead Mr. Nibnose to make this offer by telling him that if he did so I thought he might regard the matter as settled. This was the best I could do, and I think you will be wise to accept, for I believe it is your only chance of an amicable settlement.

Yours sincerely,

Spinlove seems to have managed well, and his letter is, for a change, strictly to the point.

Christmas is approaching, and on the morning of the contract date for completion Spinlove receives missives twain of good cheer from Grigblay. The first is as follows:

GRIGBLAY TO SPINLOVE

Dear Sir, 10/12/25

We have received notice from Mr. Potch, district surveyor, refusing certificate of occupation on ground that window in bedroom No. 8 is not of area required by bylaws. This is the room which was made larger by moving partition to the orders of her ladyship.

Yours faithfully,

It seems we have not yet heard the last of Lady Brash's famous big wardrobe. By enlarging the room to receive it the floor area has been increased to more than ten times the window area, which is the maximum allowed by the bylaws, and it seems Spinlove overlooked this.

The second message of glad tidings is more diffuse, but it does not lack sap.

GRIGBLAY TO SPINLOVE (CONFIDENTIAL)

Sir, 10/12/25

I think best to let you have a private word that we are going to have a serious trouble with this paint of the old gentleman's. If you ask me, I should say that the new novelty super-paint is a bit too new, a lot too much of a novelty and, if you will pardon me, a damned sight too super, and I think that Sir Leslie Brash, who ordered it, ought to put on his best spectacles and have a good look to see how he likes it before we go on and finish. As you know I refused responsibility, and I also kept the men's time from the start; and lucky for me, for this job is going to cost someone a bit of money.

The painters say the stuff is treacly and don't smell natural, though it flows nicely after the brush and no complaints; but from what our painter told Bloggs I had a good look into things today and it's like this. A coat goes on and dries hard and quick, but when the next follows it seems to soften the coat below, and the more coats the worse it gets—at least that's the best I can make of it. As you know, we have four coats on most parts and the finish on one or two doors, and on kitchen and lavatory walls. It seems fairly hard and has a nice oily gloss and a good surface, but if you look closely there is a rim of paint hanging along the bottom edge of doors and bulging out along top of skirtings of painted walls, and where the light is reflected you can make out a kind of a drag and ripple in the surface, in places. In my belief the paint is beginning to creep; it may be hard, but so is bitumen hard, and bitumen will flow out like honey give it time. This is only beginning and it isn't going to stop neither, and we shall have R.N.N.S.P. creeping out over the carpets in a few months or I'm mistaken.

It would suit me best to finish and leave Sir Leslie Brash to settle with the manufacturer, but that would be just so much waste, for when you go down you will see what I say is right. I haven't squirted any boiling acids at it nor yet french polished, but if that is to be done it had ought to be soon before Riddoppo super crawls out of the front door and off home, which is about what it's aiming for.

Perhaps, sir, you will let me know what you would wish me to do, as there is no call to have more trouble than can be helped and I gather the paint is no concern of yours any more than mine.

You will pardon me troubling you, but thought it might help to keep things straight.

Yours faithfully,

This letter is an autograph, as were other friendly messages that have engaged Grigblay's evenings with such advantage to Spinlove.

SPINLOVE TO POTCH (DISTRICT SURVEYOR)

Sir, 12/12/25

I am informed by the builder that you have refused certificate of occupation for house at Honeywood on the ground that the window in bedroom No. 8 is not the minimum size required by bylaws. It is true that this room has been increased in size since the plans were approved, but I must point out that the glass area is still more than

one-tenth of floor area : viz., glass—three times 3 ft. 6 ins. by 1 ft. 4 ins.= 16 ft.; area of floor, 10 ft. 9 ins. by 12 ft. = 129 ft. Yours faithfully,

BRASH TO SPINLOVE

Dear Mr. Spinlove, 13/12/25

I have desired Messrs. Russ and Co. to transmit cheque for £25 to Messrs. Nibnose and Rasper as a "friendly compromise" in ultimate liquidation and final settlement of their iniquitously monstrous and fraudulent claim. I never so resentfully grudged disbursing a remunerative payment more than in this instance; but as Mr. Russ, after his interview with you, confirms endorsement of your opinion I have no other alternative course but to stand and deliver.

Yours sincerely,

GRIGBLAY TO SPINLOVE

Dear Sir, 13/12/25

I write to call your attention to the Riddoppo paint which was ordered by Sir Leslie Brash. This is showing signs of creeping and we are afraid the trouble is only beginning. We are going on with the painting as ordered until we receive other directions.

Yours faithfully,

Appearances are that Spinlove has had a talk with Grigblay and arranged that he shall write this formal notification. It is to be observed that in this matter Spinlove is not responsible to Brash, who ordered the paint himself, contrary to his architect's advice. Grigblay, as we see, takes the position of being a disinterested person, and Spinlove will be wise to do the same or he may, before he knows it, fasten responsibility upon himself by one of those redundances which are so characteristic of his letters.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 16/12/25

I enclose copy of letter I have received from Mr. Grigblay, and await your instructions. I understand that by "creeping" is meant that the paint is slowly flowing down the walls, doors, etc. Yours sincerely,

Spinlove is justly entitled to disclaim responsibility, but if he had any sense of humour—and we know he has none—he could not blandly have passed the matter over to Brash without any explanations. Spinlove's original objection was rather to the scheme of decorations than to the risk of the paint's failure as paint, and Brash has good cause for grievance that he was not particularly warned of that risk. It is true he would probably have scorned the advice and given rein to his temper, but he can none the less complain that he was never given a chance of doing so. Spinlove's excuse, of course, is ignorance : he has not had the experience which would have made unnecessary the experience he is now getting.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 18/12/25

I do not precisely apprehend why you refer to me Mr. Grigblay's objection to the super-paint. That is a matter of technical craftsmanship upon which I anticipate you are competent to adjudicate. I am aware that Mr. Grigblay has all along evinced a protracted resistance opposed to Riddoppo, but after viewing the edifice today I can only asseverate—with my respects to Mr. Grigblay and acknowledgments to yourself—that I never viewed a more smooth or glossy or delightfully-tinted surface colouring. I desire that you will direct Mr. Grigblay to proceed with the work and oblige me by desisting from making these obstructive representations.

Yours sincerely,

SPINLOVE TO POTCH

Sir, 20/12/25

Permit me to remind you that I have received no reply to my letter of eight days ago. The builder informs me that no certificate has been received by him. As the owner intends to occupy the house very shortly I shall be obliged by your attention to the matter.

Yours faithfully,

POTCH TO SPINLOVE

Sir, 18/12/25

I duly received your favour informing me that three times 3 ft. 6 ins. into 1 ft. 4 ins. makes 16 ft., but did not understand you wanted me to check same for you. Unfortunately my council does not allow me to use up their time teaching London architects to square dimensions, but to oblige you my office boy has kindly gone over and makes it 15 ft.

I am, sir, Yours faithfully,

As Potch's principle is always *to hit below the belt, he will feel he has fetched Spinlove a walloper—and even Spinlove must admit a touch.*

SPINLOVE TO POTCH

Sir, 19/12/25

The slip was perfectly obvious, and whether 15 or 16 ft. is of no kind of consequence. You admit the window area is 15 ft. and floor area 129, and I must ask for certificate without more delay or I shall apply to your council's clerk. Yours faithfully,

(NEXT WEEK : XXVI—SIR LESLIE BRASH MOVES IN ; AND CONCLUSION)

THOMAS HASTINGS: AN APPRECIATION

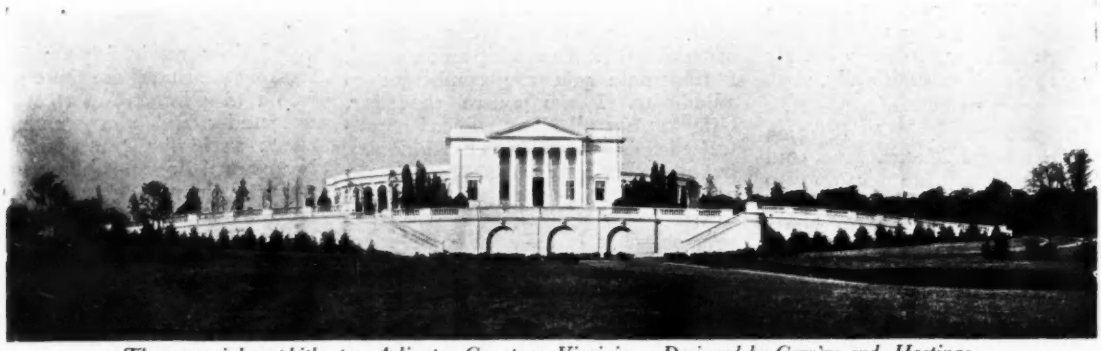
BY C. H. REILLY

THE death of Thomas Hastings removed for all a great international figure in the world of architecture, and one which before the war had been honoured publicly by France and Austria, as it was afterwards by England. For those who knew him, it removes a great gentleman, whose quick wit and ready sympathy made him a valued addition to any society. For his intimates it means the loss of a very lovable personality and of a most reliable friend. The Liverpool students, two a year, who have spent six months in his office as paid assistants each summer for many years past, have all returned with most affectionate feelings for him.

It is difficult to estimate the position and permanent influence of a man who till yesterday one knew as an active producer still turning out a great amount of work, though he had in recent years reached the stage when he could choose what most appealed to him. This was definitely monumental work. More and more in late years did municipalities, governments of States and the Federal Government itself, send him monumental problems to solve, such as a scheme for the re-layout of Central Park, New York, or the remodelling of the surrounds of the statue of General Sherman at the head of Fifth Avenue. More and more, too, in later life, like Norman Shaw with us, did he act as consultant over the elevations of important buildings.

No architect could have reached his public position unless he had given public services. In this way he served on the Federal Fine Arts Commission, which, among other valuable services, provided the United States with its present excellent coinage. He was an Academician of the National Academy of Design, President of the Beaux Arts Society, Director of the Museum of French Art, and a hundred other similar things I do not remember.

I think posterity will say, however, that his claim to fame chiefly rests on two qualities which he introduced into American architecture, one very necessary at a particular moment and one for all time. The first is French elegance. When he began with his partner, John Carrère, some thirty-five years ago, the remarkable series of big country houses and hotels on Long Island and elsewhere with which his name is connected, C. F. McKim, under whom Hastings had served, had already taught the rich merchant that he would find, in buildings Renaissance in type, structures better suited to his needs, whether in office or home, than his previous experiments in Romanesque castles, Gothic chateaux, or other strange exotics of time and place. McKim did a great work in making American taste steady and secure. To this solidity Hastings added elegance—a very necessary quality thirty years ago, even with us. This was his most direct influence, I think. His other, more indirect, was also more important.



The memorial amphitheatre, Arlington Cemetery, Virginia. Designed by Carrère and Hastings.

Somehow, he stood in America more than anyone for French ideas. Perhaps it was his rather French manner. Certainly, he was one of the earliest to receive a complete Beaux Arts training, though many have followed him since. As founder and president of the Beaux Arts Society, which provides for the great network of schools of architecture in America a continual series of competitors, he was able to impress on the minds of the rising generation the severe logic of the French method of approaching and solving architectural problems. It is this logic which has gradually transformed the American tall building, and has taken it away to realms where Hastings's own methods of expression no longer apply. Even so, I feel some of the credit is due to him. It is a greater thing to have implanted a vital principle of design than to have left behind any particular building, however beautiful.

His chief buildings, as far as I know them, are, first, the great public library, New York, full of fine things and full of youthful faults, of which he was so conscious that he told me he was leaving a great sum of money in his will, as well as the drawings, for them, and particularly the front, to be put right. Then the largest theatre in New York, called the New Theatre, is his, with its highly-decorated corridors, foyer, and staircase comparable to the Paris Opera House. In Washington he built in marble the great Arlington Memorial Amphitheatre, the cenotaph, the immense blocks of offices for the Senate and House of Representatives, and the Carnegie Institute.

Devonshire House, London, is his in all its detail and ornament. He had a great ardour for ornament, and had not only the full sizes, but the models, made under his eye. I shall always remember him working on them in a corner of his great office, with his shirt sleeves rolled up, and trotting off every few minutes to the great library which was the centre of his office in plan and in every other respect.

A view of Devonshire House from the south-east. This building was erected on the well-known and important island site facing Piccadilly.



Carrère and Hastings and C. H. Reilly were the associated architects, Thomas Hastings being chiefly responsible for the detail and ornament.

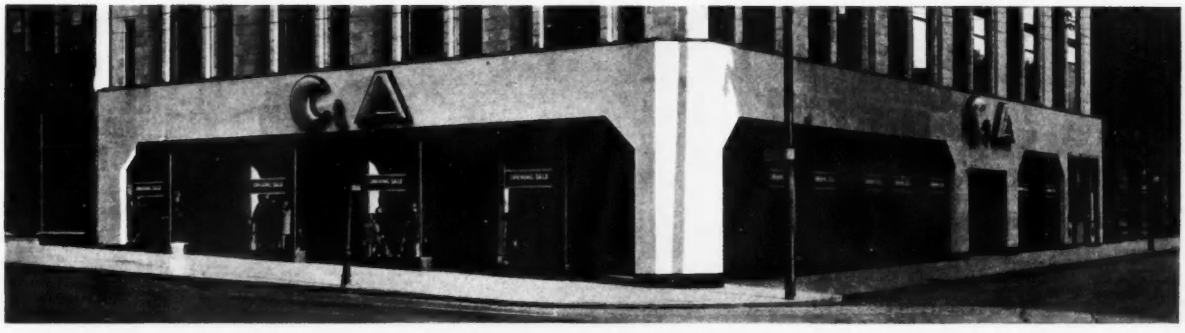
A GLASGOW LADIES' STORE

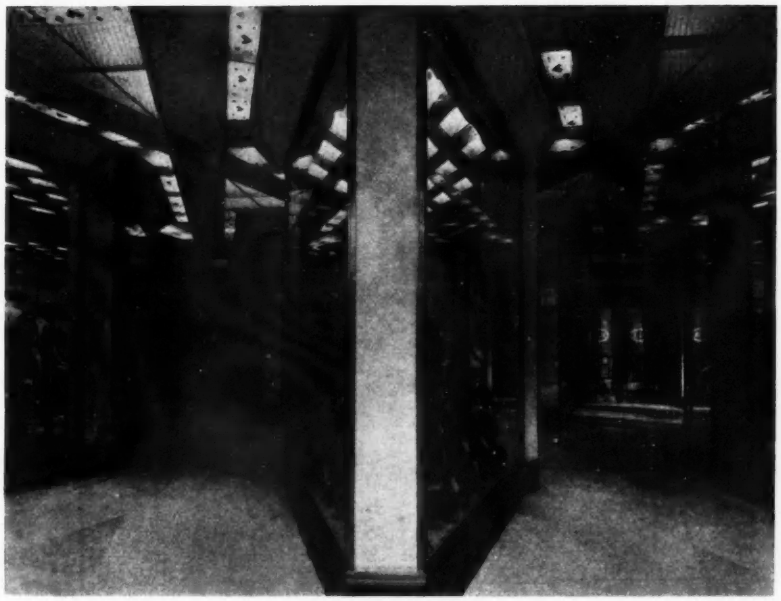
DESIGNED BY NORTH, ROBIN AND WILSDON

BEING destined for a costume store for C. and A. Modes, wherein women's clothes of quickly-changing fashion are to be displayed for sale, a maximum area of show space and window light is essential to this building. This is provided in the layout of the ground floor, where the many showcases and arcades, leading ultimately to the entrance doors, occupy nearly half its area; and in the elevations, where the bay windows, separated by minimum piers, extend for the height of four stories, unbroken save for narrow metal bands, marking each floor level. The verticality of these bays and piers is relieved by the horizontal bands of the top cornice and parapet, and the broad Roman stone fascia and shop front, the latter giving, in appearance as well as in fact, the necessary strength to the base.

The façades to Sauchiehall Street and Cambridge Street. The bold, unconventional treatment of the elevations and plan (see page 650) was necessary to comply with the conditions of maximum display-space imposed. The shop-front has been designed with a broad Roman stone fascia. The building is of reinforced concrete faced on the two street fronts with faience.





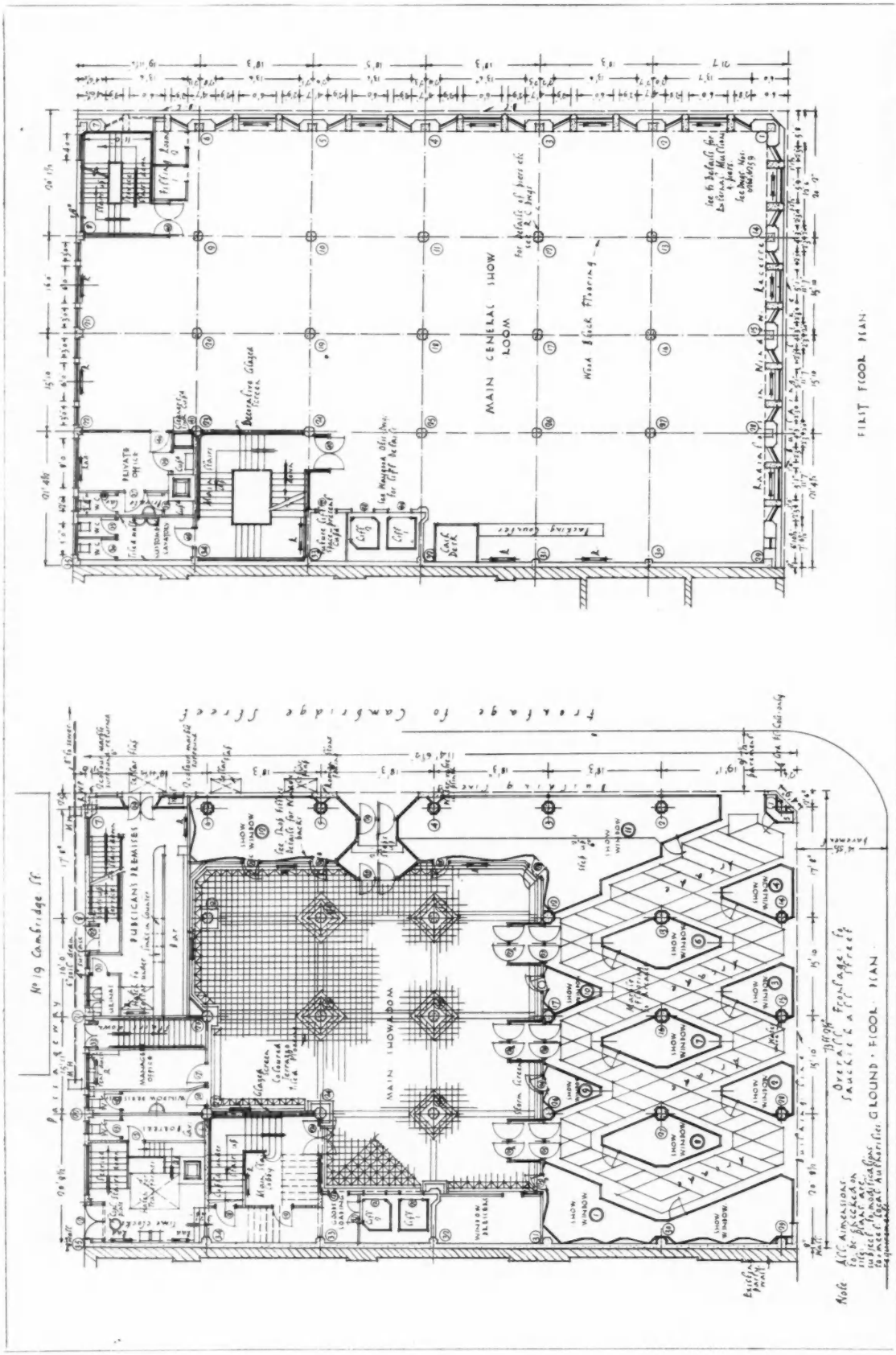


Show-windows and arcades occupy nearly half the area of the ground floor. The intersection of the approach alleys provides showcases of triangular and lozenge planning, ingeniously adapted for close inspection by potential customers, who are thus imperceptibly attracted into the shop itself.

The need for minimum pier areas called for a reinforced concrete structure. To secure cleanliness and brightness, the concrete shell is faced with faience on the two street fronts. In the interior, the concrete haunchings to the beams are stepped and splayed, rendering decorative a necessary structural member. Throughout the building the concrete walls have been "rubbed" and then painted, the showroom walls being panelled out in addition with asbestos sheets, simulating marble, and the piers encased with mirrors.

The main staircase, in a well, with its French wrought-iron balustrade, is separated from the showrooms by embossed glazed screens, and is further lightened by large mirrors and brightly painted wood panelling.

D

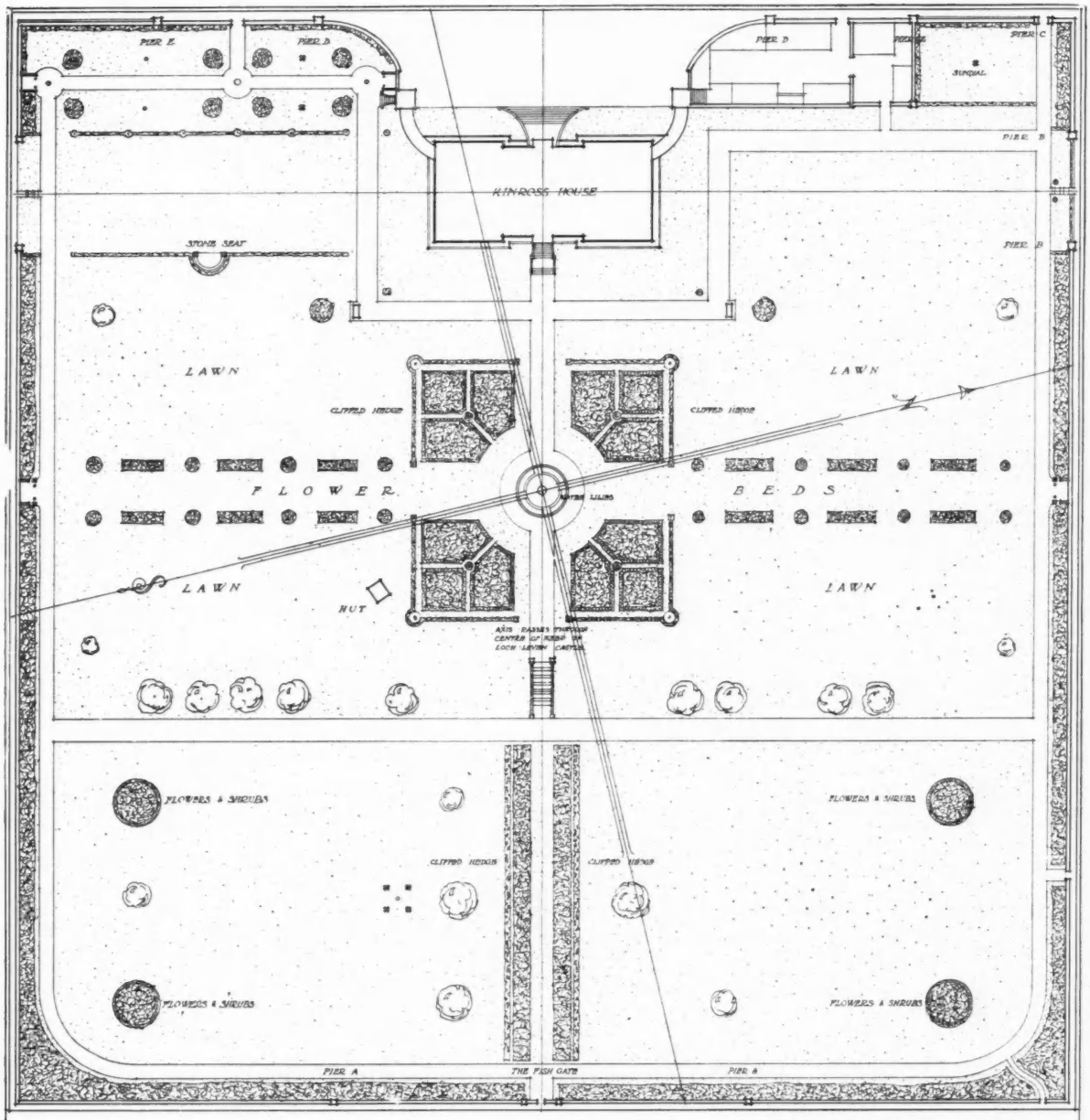


Ladies' Store, Glasgow.

[*By North, Robin and Wilson.*

Ground- and first-floor plans. On the top floors are the offices and the packing and despatching departments. These are divided by easily removable metal partitions to enable them to be transformed, without difficulty, into further showrooms. The arcades have marble flooring. The floor of the main showroom is of coloured tiles; that of the main general showroom of wood.]

THE HOUSE OF WILLIAM BRUCE: AN ARCHITECT'S HOME



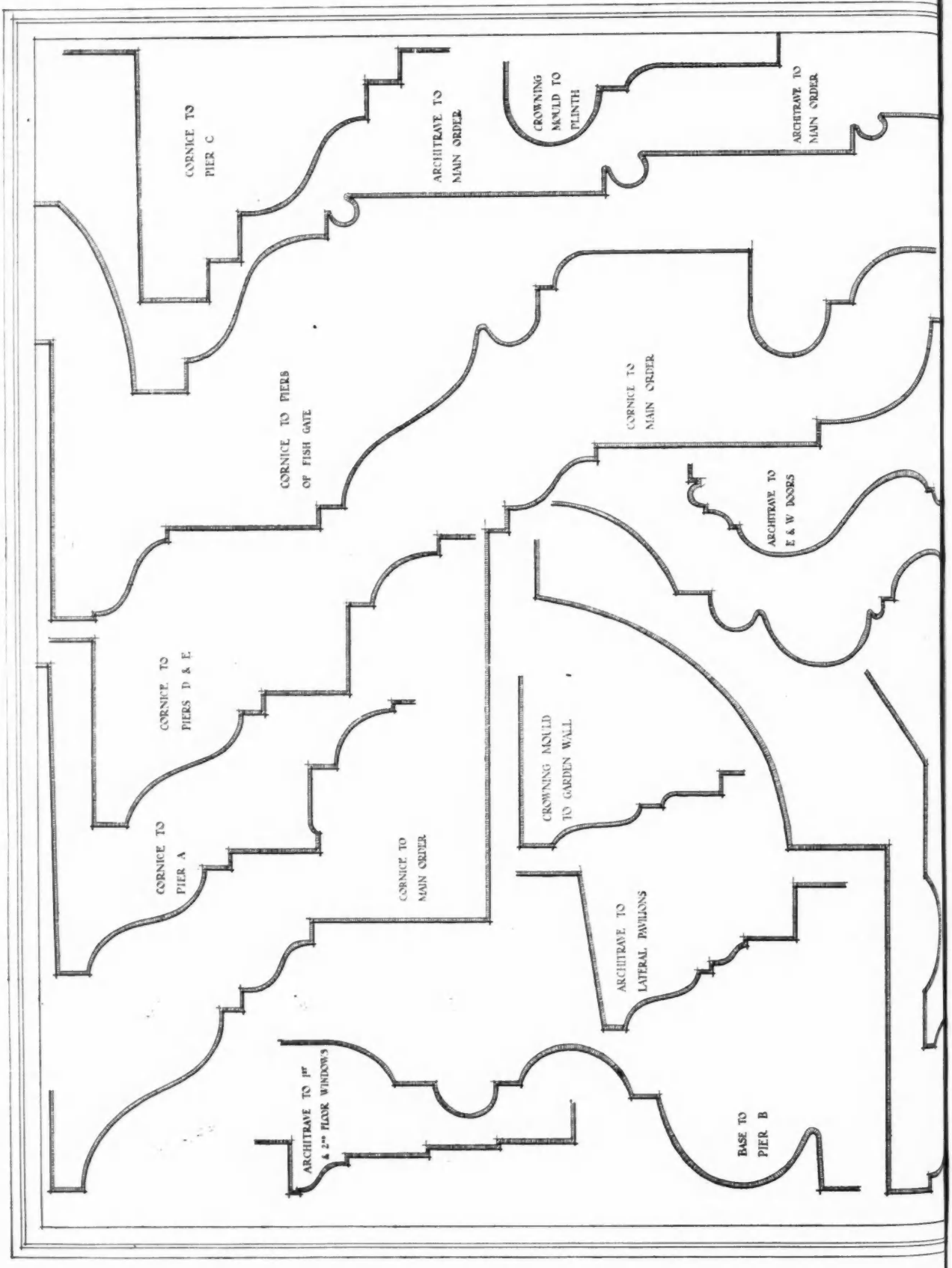
KINROSS HOUSE, KINROSS, SCOTLAND

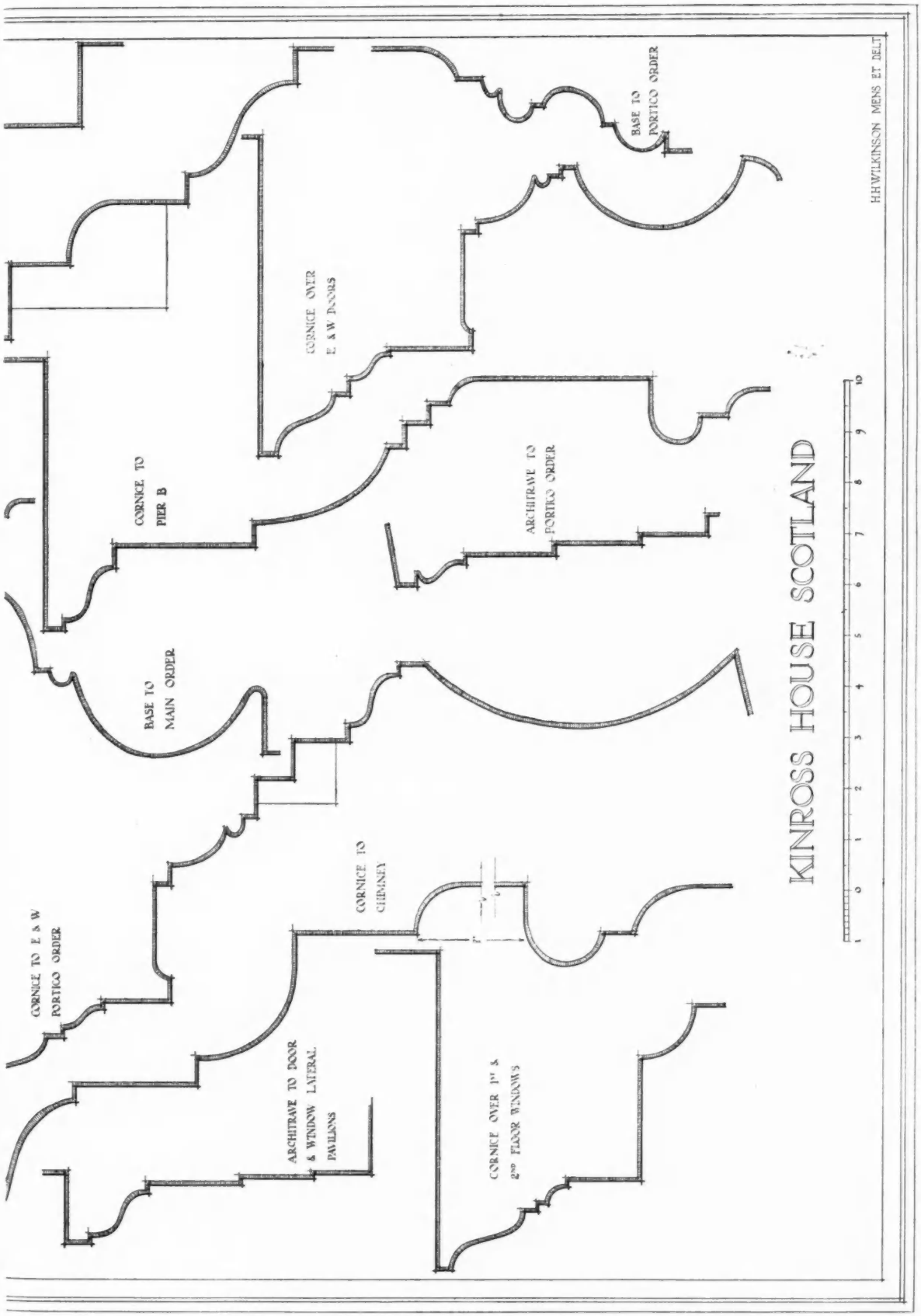
ARCHITECT SIR WILLIAM BRUCE 1685

LAYOUT OF WALLED GARDEN

Writing in the year 1710, Sir Robert Sibbald, the great physician and historian of Bruce's county of Kinross, says that "for situation, contrivance, prospects, avenues, courts, gardens, gravel walks and terraces, and of hortulane ornaments, parks and planting" Kinross House is surpassed by few houses in the country. Details of the garden piers and ornamentation appeared in our issue for September 25 last. The details reproduced on the following two pages conclude the series.

them to be transformed, without difficulty, into further showrooms. The arcades have marble flooring. The floor- main showroom is of coloured tiles; that of the main general showroom of wood.


CORNICE TO PIER C
ARCHITRAVE TO MAIN ORDER
CROWNING MOULD TO PLINTH
ARCHITRAVE TO MAIN ORDER
CORNICE TO PIERS OF FISH GATE
CORNICE TO MAIN ORDER
ARCHITRAVE TO E & W DOORS
CORNICE TO PIERS D & E
CROWNING MOULD TO GARDEN WALL
CORNICE TO PIER A
CORNICE TO MAIN ORDER
ARCHITRAVE TO LATERAL PAVILIONS
ARCHITRAVE TO 1ST & 2ND FLOOR WINDOWS
BASE TO PIER B



The interesting moulding details which are to be found in Kinross House are shown above. Details of the garden piers and of the Fish Gate (September 25 issue) are included.

SOCIETIES AND INSTITUTIONS

IRISH A.A.'S NEW PRESIDENT

Mr, W. H. Howard Cooke, A.R.I.B.A., M.R.I.A.I., has been elected President of the Architectural Association of Ireland for the forthcoming year.

THE GARDEN CITY MOVEMENT

The Minister of Health recently received a deputation from the Garden Cities and Town Planning Association.

The deputation, which was introduced by Mr. Cecil Harmsworth, urged that new machinery is required in order to further the garden city movement, the general principles of which are approved by all parties. They asked that the Government should investigate the difficulties in the way of a more rapid development of garden cities under existing legislation, and also that a statutory body should be established to undertake the actual initiation of new garden city development.

The Minister of Health, in reply, said that he would give further and careful consideration to the suggestions which had been made to him.

THE EGYPTIAN TEMPLES

Sir Banister Fletcher, P.R.I.B.A., in describing the temples of the Egyptians in a lecture at the Central School of Arts and Crafts, said that each one of the temples was designed to be approached along imposing avenues of crouching sphinxes, past obelisks and royal statues, through diminishing stages of gigantic pylons, open courts, and forests of columns in the hypostyle halls, to the mysterious hidden sanctuary, to which only kings and priests might penetrate.

In the priestly processions and hidden rites the people had no part. Thus, the plans and arrangements of those temples differed vastly from the Greek temple, the Mohammedan mosque, or the Christian church. Chief among them were those on the east bank of the Nile, in the parts of Thebes known as Karnak and Luxor. Of these the great Temple of Ammon surpassed all others in grandeur, and gradually grew by the additions of successive kings much in the manner of an English cathedral. Here in the great hypostyle hall, we saw the first trace of the clearstory window. Chief among the many Pharaohs who added to these monumental structures was Rameses the Great. On the level ground on the western bank of the Nile at Thebes were the mortuary temples, including the "Ramesseum"; next came the rock-cut temples, foremost among which was the great Temple at Abu Simbel, and finally there were the "Mammisi" temples.

SUNLIGHT AND HEALTH

Dr. C. W. Saleeby, F.R.S.E., speaking on sunlight and its relation to health, at the eighteenth annual conference of the British Commercial Gas Association, held at Eastbourne, said he believed the chief way in which more sunlight can be obtained is through the strengthening of the smoke-abatement laws.

He considered that the Public Health (Smoke Abatement) Act, 1926, was not sufficiently wide in its scope. He stated that he made efforts during the reign of Mr. Neville Chamberlain at the Ministry of Health, to get a clause inserted into the Act empowering local authorities, if they will, to require the installation of smokeless equipment in new houses in their area. Mr. Chamberlain declined even to consider new domestic chimneys. Dr. Saleeby hoped that Mr. Chamberlain's Labour successor, Mr. Arthur Greenwood, would be more amenable to his suggestion, and thereby take an important step in guarding the welfare of the public.

Dr. Saleeby stressed the fact that the gas industry, because it obviates smoky fuels, and gives in their place clean, smokeless gas fires, is doing a great public service, and helping to attain his ideal of a smokeless Britain.

THE DESIGNS FOR GREENWICH HOSPITAL

A special exhibition of the designs for Greenwich Hospital of Sir Christopher Wren and Sir John Vanbrugh, with the work of Hawksmoor and James as their assistants and clerks of works, is now on view at Sir John Soane's Museum, Lincoln's Inn Fields, W.C. The original warrant, with the drawings attached, is shown in facsimile, as signed by King William III in 1696, on the presentation of the drawings by Sir Christopher Wren.

The designs and studies up to 1702 show that the pavilion principle, now common in hospital planning, was anticipated by Sir Christopher Wren. A change then takes place, which appears to coincide with the new Royal Commission, on the accession of Queen Anne in 1702, the abolition of the "Fabric Committee," and the appointment of new directors, of whom Sir John Vanbrugh was one. His official appointment as surveyor to the hospital in 1716 merely recognized a long-standing position. Wren seems to have ceased his attendances about 1710, and in 1713 excused attention to the Books of Account of the three previous years, on the grounds of the Queen's business, and then in 1716, when asked if he wished to continue, replied in the negative. This does not imply any disagreement with Vanbrugh, who was half his age and whose genius there is good reason to think he appreciated.

The fifty-three plates of reproduction by collotype and ten pages of half-tone blocks, on exhibition at the museum, form part of the sixth volume of the Wren Society, which it is expected will be issued to subscribers by Christmas 1929.

Applications for membership of the Wren Society should be addressed to Mr. H. Duncan Hendry, 6 Bedford Row, W.C.1.

READER'S QUERY

CLARIFYING WATER

A French architect writes: "Is there a reliable apparatus, which is economical and easy to maintain, for clarifying dirty water containing clay and earthy matter, which will not reduce the delivery from the tap? The clarified water will be used for toilet and washing purposes, and will be filtered before being used for drinking."

The dirty appearance of the water is no doubt due to clay, the particles of which may be present in a very fine state of subdivision. No difficulty should be experienced in clarifying this water by the addition of a small quantity of some chemical substance which will coagulate it.

Sulphate of alumina is used largely for this purpose; it reacts with the calcium carbonate already present in most natural waters. If no calcium carbonate is present, however, small quantities of this in the form of chalk must also be added. The chemical reaction of the sulphate of alumina with the chalk causes an insoluble gelatinous substance to form, which entangles the fine suspended particles of clay, other earthy matter, and also bacteria that may be present in the water. This may be removed by filtering through coarse sand or silica grit, rendering the water perfectly clear and suitable for all domestic purposes.

Further data regarding the chemical properties of the water would be required before determining the amount of sulphate to be added, which would range between five and fifteen grammes per cubic metre of water treated. If the sulphate is used in excess, there is the possibility of secondary coagulation after filtration.

Small filters, which are fitted with automatic gear for adding the coagulent in the quantities required, and which are continuous in working, may be obtained. Here, also, information would be required as to the quantity of water to be treated per day, and the pressure available, before a suitable filter could be supplied.

If a sample of the water and full particulars as to the quantity and method of supply were sent to the Compagnie Générale de Filtrage, 17 Rue des Pyramides, Paris, they would doubtless be pleased to advise upon a suitable apparatus. R. H.

AN IMPROVED (SIC ?) PETROL SIGN

It will be remembered that during the first half of this year an open competition was held for the design of a standard sign, etc., for petroleum filling stations. The competition came about through the initiative of Sir Lionel Earle, Secretary of H.M. Office of Works, who sought the advice of the R.I.B.A. ; and the then President appointed a jury of five architects to draw up the conditions, in consultation with Sir Lionel—and make the award. This was duly done, and the designs submitted (110 in all, and admittedly disappointing) were exhibited at the R.I.B.A. The winning design was at the time reproduced in THE ARCHITECTS' JOURNAL (see issue for April 10, 1929).

In making their award, the jury were conscious of certain imperfections in the design placed first, and recommended some modifications. Further, to meet the view of the Petroleum Filling Stations Committee, its chairman, with Sir Richard Allison, and the secretary of the committee, met the author of the winning design, together with the jury of assessors, when the amendments thought desirable were fully discussed. The earlier report of the committee (dated May, 1929) contained a page left blank for the "Specification and Sketch of Standard Sign."

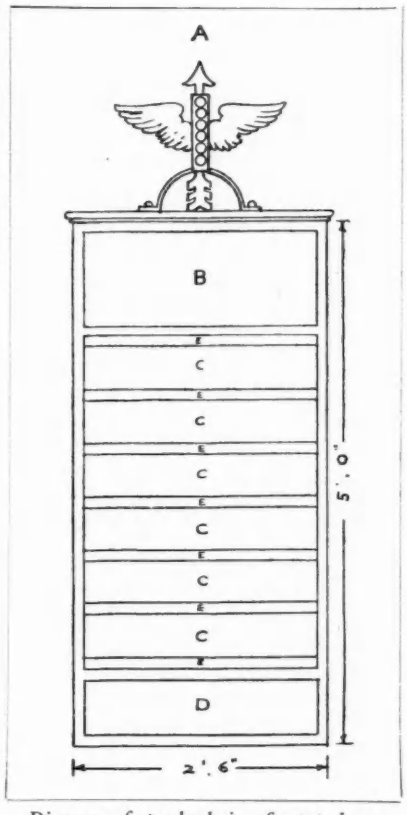


Diagram of standard sign for petroleum filling stations, as amended.

Meanwhile, the designer had been asked to incorporate the suggestions put before him as a preliminary to the making of a full-size model which, in due course, the committee caused to be prepared.

Exit the jury of assessors, who did not see the revised design, nor the model, and were not further consulted.

Subsequently a supplementary report (dated July, 1929) was issued, and this has lately come into our hands. It contains, in an appendix, on page 5, a Diagram of Standard Sign (which we now reproduce); on page 6, a Description of Sign, and on page 7, Standard Lettering and Numerals, drawn one quarter full size.

The lettering, based on the Trajan column inscription, is excellent, as are the numerals, but the sign itself is anything but inspired, and bears no resemblance to the winning design. At first glance one gets an impression of a chest of drawers, or a bookcase, surmounted by a feeble and inadequate symbol in the form of a winged arrow (pointing upwards for no apparent reason), for all the world resembling a large mechanical toy insect !

It is explained that the symbol has a gilded finish, and that the reflecting studs in the arrow shaft are optional. The curved stay supports are finished black. Space B is a fixed panel for name of proprietor or station, with silvered or white painted lettering on a black ground. Spaces C are movable slats for names of fuels, oils, etc., with similar grounds and lettering. D is a fixed panel for any other inscription required, with lettering and ground as above. E represents open spaces. The frame is to be scarlet enamelled or flat painted finish, and to be constructed with slotted sides for the insertion of movable slats.

While making every allowance for the fact that the bald diagram lacks the lettered slats, and conceding that the use of the standard sign will greatly improve the appearance of filling stations, it does seem unfortunate that a better symbol could not have been evolved.

The sign is to be displayed on petroleum filling stations in lieu of advertisements. The report states that . . . "it is most desirable that the sign should be such that it will receive the support of public opinion, and will be used not only in all areas controlled under bylaws made under Section II. of the Petroleum (Consolidation) Act, but generally throughout the country, to the benefit of both trade interests and the motoring public.". . .

The committee . . . "do not consider it desirable to specify the materials of which the sign should be made, the details of construction, or the manner in which it should be produced and displayed, as it will be appreciated that the general treatment indicated can be adhered to by the use of various materials, *and the sign can be displayed either by projecting from a wall or standard suspended from a wall bracket, etc., or fixed to a wall surface.*" . . .

(The italics are ours, to stress this merit of adaptability.)

Maximum dimensions are figured on the diagram. It is recommended that . . . "whenever smaller signs are employed, the width of the sign should remain constant, only the length of the sign being reduced. Reduction in length from the maximum should, as a rule, be effected by the omission of the movable slats, but not less than three slats should be included in the sign as a minimum." . . .

The committee also . . . "consider it desirable that signs of the illuminated box form type with glazed panels as an alternative to movable slats, as well as signs of the reflecting type, should be permitted, provided that the general lines of the design indicated and the requirements as to reduction in length of the sign are followed." . . .

In short, no detail in these sign "form types" seems to have been overlooked, save the æsthetic aspect. A. B.

CORRESPONDENCE

THE POLYTECHNIC HEATING PLANT

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I read with interest your footnote to my letter in your October 23 issue. I agree that the Polytechnic heating installation has novel and interesting features, some of which are different from those in the installations at Newcastle. But I would remind you that the claims of your contributor were that the Polytechnic installation was (*a*) the "first of its kind operating in Great Britain, employing a high-tension electrode boiler; (*b*) with thermal storage system; (*c*) the heat being distributed by means of low-pressure hot water."

The three features which I have called (*a*), (*b*) and (*c*) are all included in the Hutton Terrace and Carliol House installations, and I maintain that the honour I claimed for Newcastle is upheld.

However, as an electrical engineer who religiously and regularly reads and enjoys THE ARCHITECTS' JOURNAL, including even its lively criticism of the light, elegant and architect-designed lattice-work towers (often, but very wrongly called pylons), now being used for supporting electric transmission lines over rural England, I am only too pleased to see that when and

where cheap electricity is available it is being used, as it should be, as an active weapon in the war against grime and dirt. I, personally, have nothing but admiration for the Polytechnic scheme; and, as a Tynesider, I am more than glad to know that the good example of Tyneside is being followed in other important parts of the country.

R. W. GREGORY

THE HONEYWOOD FILE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I should like to join in the chorus of appreciation of "The Honeywood File," and I am delighted to read that you hope to preserve its humour and insight in a more permanent form.

But I quarrel with "Karshish" in one matter—the nature of the distinction which he makes between the professional and the commercial man. Brash, we are told, does not "distinguish between the obligations due to a professional man and the consideration expected by a commercial agent"; and it is more than once suggested that the former is actuated by a high ideal of service, and the latter by a low ideal of gain.

Both the professional and the commercial man ought to work for a living, as that is the only course for an honest man; for he who consumes without producing is a thief. Some have more regard for what they give than for what they gain: others, the reverse; but this is an individual and not a class or occupational difference, and to suggest otherwise savours of snobbery and false values.

CHARLES COWLES-VOYSEY

COMPETITION CALENDAR

November 2. The City of Birmingham Museum and Art Gallery Committee propose to erect a Branch Art Gallery at the Pebble Mill Road entrance to Cannon Hill Park, and invite architects practising within the City boundaries to submit competitive designs. Total cost, £6,000. Assessor: Ernest C. Bewlay, F.R.I.B.A. Premium: £100. Application for conditions of the competition, etc., should be made to S. C. Kaines Smith, Keeper, Museum and Art Gallery, Birmingham. Deposit 10s. 6d. Latest date for submitting designs: November 2.

November 8. The Somerset Rural Community Council, in conjunction with the R.I.B.A., invite architects and architectural assistants resident in Somerset to submit designs for Country Garages and Petrol Filling Stations. Assessor: Harold E. Todd, A.R.I.B.A. Prizes: The "Sir Charles Wakefield" prize, £10 10s. and silver cup presented by the Somerset Automobile Association. Further prizes of £7 7s., £5 5s. and £3 3s. and two cups presented by the S.A.A. Particulars from the Secretary, Somerset Rural Community Council, 42 Bridge Street, Taunton. Deposit 10s. 6d.

November 30. The Hull Corporation invite architects to submit schemes in competition for the façades of the New Street from Paragon Station to Beverley Road, Hull, and openings to adjoining streets. Assessor: Sir Reginald Blomfield, R.A., P.P.R.I.B.A. Premiums: £750, £350 and £150. Applications for conditions of the competition, etc., should be made to J. R. Howard Roberts, Town Clerk, Guildhall, Hull. Deposit £1 1s. Latest date for sending in designs: November 30.

December 7. The Provost, Magistrates, and Councillors of Dumfries invite architects practising in Great Britain to submit competitive designs for the Town Hall and Municipal Offices, which it is proposed to erect on the site of the old Town Hall and of the Municipal Offices. Dumfries. Assessor: Sir George Washington Browne, P.R.S.A. Premiums: £300, £200, and £100. Application for conditions of competition, etc., should be made to R. A. Grierson, Town Clerk, Town Hall, Dumfries. Deposit £2 2s. Latest date for sending in designs: December 7.

April 28, 1930. Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated in 1930. The vase is intended as a centrepiece, and may be either a simple vessel decorated in relief and colour, or an architectural composition embodying ornamental adjuncts in the round. It should not exceed eighteen inches in height, though to this dimension not more than six inches may be added for a pedestal or plinth. The decoration is to be by means of ornament applied to a ground of contrasting colour, as is the custom in this manufacture. Assessors: Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums: £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs: April 28, 1930.

No date. Competition for the best-designed labour-saving houses in three types, priced at £750, £850, and £1,000 respectively. Premium: 100 guineas. Application for conditions of the competition, etc., should be made to C. E. Oxley, Secretary, B.C.S. Housing Scheme, Chaddeston, Park Road, Derby.

TRADE NOTE

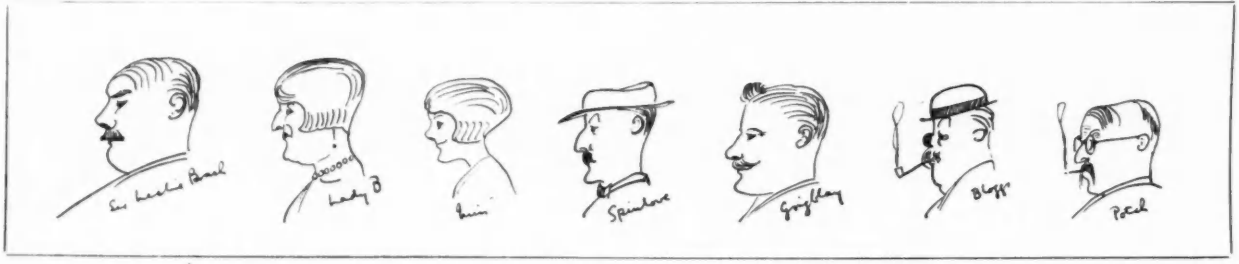
An Electric-Oil Heat Storage System

Many advantages are claimed by Messrs. Browns' Dryers, Ltd., for their electric-oil heat storage system. The system and apparatus were invented and designed to absorb electricity during the night, or low-load hours, converting it into heat and storing the heat in oil under atmospheric pressure only, at a temperature of about 550° Fahr.; such heat to be used during the day for any required purpose. The electricity is turned on to the heating elements by a time switch, which is under the control of the electric supply station, and is switched off by a thermostat when the oil reaches the desired temperature.

The heating is by means of Browns' special porcelain wound heating elements immersed directly in the oil, by means of which, it is claimed, 100 per cent. efficiency is obtained in the conversion of electricity into heat. The heating elements, it is said, never require renewing. The arrangements for transferring the heat from the oil to water or air are such that 100 per cent. efficiency is claimed for the system, the only loss being the radiation from the outside of the apparatus, which is well protected with non-conducting material.

The apparatus is so designed and arranged that the oil, to be used for commercial installations, in cooking and in heating air or water, for central-heating installations and domestic purposes, retains its high temperature until practically all of the heat has been utilized. The oil in which the heat is absorbed is contained in a tank—thoroughly insulated to prevent loss of heat—and in central-heating installations this oil is taken from the top of the storage tank and passes through a calorifier into the bottom of the storage tank again. The water being heated passes upwards through the calorifier and on to the radiators if for central heating, or to the bathrooms and taps if for domestic purposes. The flow of oil through the calorifier is controlled by thermostatic valves operated from the hot-water supply, so as to maintain the water at a constant temperature. The oil is claimed to last indefinitely.

In large central-heating installations both the flow of the oil from, and returning to, the storage tank, and the flow of air or water circulating around the building, may be



The above sketches have been drawn by a reader, and are his representations of the chief characters in "The Honeywood File."

assisted by motor-driven pumps or motor-priven fans, the speed or volume passed by which is controlled by thermostatic valves to ensure constant temperature of the heating water or air.

In commercial work, it is claimed, the heat stored in the oil may be utilized for any and every purpose where heat is required, especially where close regulation or high temperatures are necessary. It is also claimed that fire risk cannot arise from the apparatus itself, and when arising from external sources the risk is much less than with oil-immersed transformers.

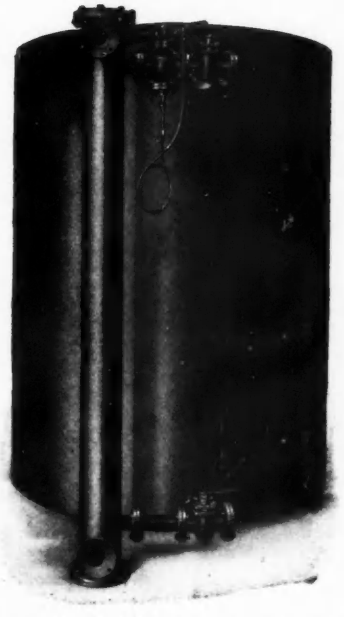
Mr. J. F. Simpson, M.I.E.E., M.I.MECH.E., of Fulwood, Preston, says: "In my opinion the Brown oil-heat storage system has a wide industrial and domestic application, and has many advantages over any other system, many of which advantages are unique."

Mr. J. C. Elvy, chartered electrical engineer, of London, says: "With the general lowering of prices for electricity in all districts, I am convinced that the Browns' system of heat storage has a wide field of application and will rapidly supersede all other methods of central heating of buildings."

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Lloyds Bank (pages 632-37). General contractors, Lole & Co. Sub-contractors: B. Goodman, Ltd., demolition; Diespeker & Co., Ltd., reinforced concrete, fireproof construction and stair-treads; W. T. Lamb and Sons, bricks; South Western Stone Co., stone; Braithwaites, Ltd., structural steel; Greenway and Ludlow, Ltd., Longchamp stone; Parkinsons, tiles; London Sand Blast Co., Goslett & Co., and Newton & Co., glass; Binder, patent glazing; Stevens and Adams, wood-block flooring; F. A. Hughes & Co., Triolin flooring; Henry Hope and Sons, central heating, casements, and window furniture; George Wright & Co., stoves; Davis Gas Fire Co., gas fixtures; Gilham and Jones, bells, electric wiring, electric light fixtures and electric heating; O'Brien Thomas & Co., sanitary fittings; Comyn Ching & Co., door furniture; Martin & Co., and Haywards, Ltd., iron staircases; Avery & Co., sunblinds; George Jackson & Sons, plaster and decorative plaster; Martin & Co., and Kingswell, metalwork; Green and Vardy, and Lole & Co., joinery; South Western Stone Co., stonework; H. Wilkinson, carving; Art Pavements and Decorations, Ltd., marble; Green and Vardy, furniture; George Johnson, lifts.



A new electric-oil heat storage system. By Browns' Dryers Ltd. (See Trade Note.)

New Geology Building (pages 638-42). General contractors, Joshua Henshaw and Sons. Sub-contractors: Trussed Concrete Steel Co., Ltd., reinforced concrete engineers, floor construction; Stuarts Granolithic Co., Ltd., staircases; Express Lift Co., Ltd., lift; J. C. Edwards, Ltd., terra-cotta; E. O. Griffiths, models and stone carving; Brightside Foundry and Engineering Co., Ltd., heating; R. W. Haughton, plumbing; E. P. I., Ltd., electrical work; Doulton & Co., sanitary fittings; Williams, Gamon & Co., metal windows; Luxfer Ltd., lantern light over museum; Sefton Lift and Shutter Co., window blinds and lantern screen; Walter Macfarlane & Co., cast-iron railings and staircase balustrade; Hollis Bros., block flooring; George Swift, tiling; John Heywood, Ltd., laboratory benches and fittings; Quiggin Bros., ironmongery; J. B. Johnson & Co., granolithic floors; George Lowe & Sons, spiral staircase; Art Pavements and Decorations, Ltd., armadek flooring; J. H. and I. Sankey, oak seating to lecture-room; Waring and Gillow, Ltd., library fittings; Cashmore Art Workers, bronze tablet.

C. and A. Modes, Ltd. (pages 649-50). General contractors, Melville, Dundas and Whitson. Sub-contractors: Thaw and Campbell, demolition and excavation; Limmer and Trinidad Lake Asphalte Co., asphalte; Leeds Fireclay Co., Ltd., terra-cotta; F. A. Norris & Co., metal partitions; Scottish National Glass Co., and Baillie and Telfer, glass; Wm. Anderson & Co., cast lead and plumbing; Hollis Bros., wood block flooring; Saunders and Taylor, central heating; Beeston Boiler Co., boilers; J. Charters, electric wiring and electric bells; Mortimer and Gall, electric light fittings; F. Sage & Co., Ltd., shop window ventilation; Leeds Fireclay Co., Ltd., sanitary fittings; Rockwood Terrazzo Co., stair-treads; Lips, Ltd., and Scottish National Glass Co., door furniture; Luxfer, Ltd., metal casements, window furniture, and pavement lights; Cashmore Art Workers, wrought-iron gates; Carron Company, iron staircases; F. Sage & Co., sunblinds; George W. Sellars and Chrisholme Decorators, Ltd., decorations; George Rome & Co., plaster and tiling; Bell's Poilite and Everite Co., Ltd., decorative wall covering; A. Emanuel and Sons, and F. Sage & Co., metalwork; Samuel Elliott and Sons, Ltd., Evos Doorways, Ltd., and Melville, Dundas and Whitson, joinery; Art Pavements and Decorations, Ltd., marble; Waring and Gillow, and Archibald Stewart & Co., textiles; Thonet Bros., furniture; Samuel Elliott and Sons, Ltd., and F. Sage & Co., mirrors and shop fittings; F. Sage & Co., shop fronts; Hatherley Works, Ltd., office fittings; Waygood Otis, lifts; British Time Recorder Co., and Arthur Lyons & Co., clocks; Nash and Hull, and F. Sage & Co., signs; reinforced concrete designed by Considere Construction Co., Ltd.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

30598. Bettles, J. W. E., Clark, F. H., and Goodyear, C. W. Stair treads, platforms, &c. October 9.

31050. Cowper, E. O. Roadways, floors, &c. October 12.

30772. Dorman, Long & Co., Ltd., and Pain, J. F. Swing bridges. October 10.

30823. Frewen, E. J. Facing for walls of buildings. October 11.

30958. Holm, A. V. Doors. October 11.

SPECIFICATIONS PUBLISHED

320028 and 320047. Brown, Sir A. W. Heating systems.

320054. Clark, G. M. (Bell & Co., Proprietary, Ltd., J.). Completely closed hollow block for use in building - construction and method of and means for making same.

320105. Heymann, M. Reinforcements for concrete and the like and reinforced constructions made therefrom.

320132. Nissen, P. N., and Nissen Buildings, Ltd. Roofs for portable buildings.

ABSTRACT PUBLISHED

317932. Foundations. Cocking, W. C.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BERMONDSEY B.C. is to borrow £6,649 for a site in Purnell Place, for the erection thereon of a three-storey block of nine flats.

Mr. E. J. Shelmerdine proposes to erect buildings on the site of 9, 10 and 11 Milborne Street, abutting on Middlesex Place, HACKNEY.

The L.C.C. has obtained powers for the acquisition of a site at New Park Road, CLAPHAM PARK, for the erection of tenements.

The EAST HAM Corporation Housing Committee proposes to make use of ten acres of land near the parish church for a housing scheme.

Plans passed at CLAPHAM: Additions, Cleeves factory premises, South Side, for Messrs. Yetts, Sturdy and Usher; extensions, St. Mary's Church, Park Road, for Messrs. Harrison and Cox; showroom, Park Hill, for Mr. W. G. James.

The WANDSWORTH B.C. has approved sketch schemes prepared by Mr. G. L. Elkington, A.R.I.B.A., for the erection of blocks of flats on the sites in Garratt Lane, Merton Road, and Acuba Street.

Plans passed by the HACKNEY B.C.: Shop, adjoining 63 Warneford Street, for Messrs. G. Butters and Sons; bank, Stoke Newington High Street, for Messrs. Patman and Fotheringham, Ltd.; workshop, rear of 268 Richmond Road, for Mr. J. Orchard.

Plans passed by the ST. PANCRAS B.C.: Building, Southampton Street, between Euston Road and Warren Street; building, 24–32, Cleveland Street, and 56 Tottenham Street; additions, 104 Regent's Park Road; building, Gower Street; alterations, "Oxford Tavern," 265 Kentish Town Road.

The Ministry of Health has approved the Camden Road housing scheme as amended by the ST. PANCRAS Borough Council. There will be twenty-two flats with shops or offices on the ground-floor frontage and a public health centre. The total cost will be £20,994.

The SOUTHWARK B.C. has approved the erection of a new town hall on the present and adjoining sites and the borough engineer has submitted preliminary proposals and details. It appears, however, that in any scheme which the Council may ultimately adopt, provision will have to be made for removing the central public library from its present location to an adjoining site.

Plans passed at STREATHAM: Amended plan of theatre, Streatham Hill, for Pitcher Construction Co., Ltd.; twelve houses, Conifer Gardens, for Mr. B. G. Utting; sixteen houses, Leigham Court Road, for Mr. H. Chasemore; alterations, Golden Domes Cinema, High Road, for Messrs. Kirk and Kirk, Ltd.; twelve houses, Ellison Road, for Mr. H. F. Buchan; six houses, de Montfort Road, for Mr. A. Soden.

Plans passed by the SOUTHWARK B.C.: Alterations, "The Ring," Blackfriars Road and Union Street, for Mr. Robert Cromie, F.R.I.B.A.; building, 46 Comus Place, for Mr. H. Dicksee; building, 17 Bankside, for Messrs. Beck and Pollitzer; building, 10–16 Cole Street, for Mr. A. D. Robinson; bridge, across Cathedral Street, for Hay's Wharf, Ltd.; new building line, St. George's Road and 68 London Road, for Mr. S. Clough.

The L.C.C. has prepared the following schemes for carrying out under the unemployment relief scheme: Construction of storm-water pumping station at DEPTFORD, cost, £230,000; improvement of River Graveney in WANDSWORTH, cost, £60,000; enlargement of Lots Road pumping station, CHELSEA, cost, £250,000, and a concrete river wall at WANDSWORTH PARK, at a cost of £30,000.

Plans passed by the WANDSWORTH B.C.: Alterations and additions, 177 High Street, for Messrs. J. Lyons & Co., Ltd.; fourteen houses, Gatton Road, Tooting, for Mr. F. W. Kerven; alterations and additions, "Fox" beerhouse, Tooting High Street, for Mr. A. W. Blomfield; offices and stores at Cementone Works, Garratt Lane, for Mr. G. P. D. Saul; rebuilding "Earl Spencer" public-house, Merton Road, for Messrs. F. J. Fisher and Son; six houses, Augustus Road, Southfield, for Messrs. Grainger and Apthorpe.

Plans passed by EAST HAM Corporation: Alterations, 104–6 High Street, for Mr. H. E. Jerram; mission hall, Shrewsbury and Bristol Roads, for Messrs. J. Harrison & Co.; two houses, Bristol Road, for Mr. W. Grover; alterations, 225 High Street, for Mr. G. A. Yeulett; alterations, 212 High Street North, for Mr. W. S. Luton; alterations, 453 Katherine Road, for Mr. R. C. Turner-Gordon; alterations, Empire Kinema, Barking Road, for Mr. W. S. Trent, architect; twenty garages, Sheringham Avenue, for Mr. A. R. Upsdale; two houses, Little Ilford Lane, for Mr. F. Smith.

Plans passed by the WIMBLEDON Corporation: House, Wool Road, for Mr. A. J. Styles; leather dressing and drying rooms, Wandle Mill, Wandle Bank, for Messrs. R. J. and J. S. Thomson; cottage, Oakhill School, Edge Hill, for Mr. T. Roker; two houses, Copse Hill, for Mr. Herbert W. Doe; bungalow, The Drive, for Messrs. W. H. Gaze and Sons; two repair and paint shops and eight garages, Merton High Street, for Messrs. Chart, Son and Reading; house, Copse Hill, for Mr. A. Styles; convenience, junction of Gap Road and Durnsford Road, for Mr. T. Webster, borough engineer and surveyor; two houses, Drax Avenue and Dunstall Road, for Mr. A. K. McKay; two houses, Richmond Road, for Mr. A. G. Hastilow; house, Ridgway, for Mr. J. C. Walker; shops, The Ridgway, for Mr. E. Iles.

Plans passed by the POPLAR B.C.: Offices, Gas Works, Bow Common Lane, for Messrs. W. Downs, Ltd.; addition to premises, Glengall Road, for Messrs. F. Rowntree and Sons; new offices, Messrs. Gliksten's premises, Carpenters Road, for Messrs. J. and J. Dean; new offices, Falcon Works, Ellesmere Street, for Mr. F. H. Field; additions, 304–306 West Ferry Road, for Messrs. Hooper, Cushen & Co.; additions, Victoria Gramophones, Ltd., premises, Old Ford Road, for Messrs. Fuller, Hornsey, Sons and Cassell; building (new school), Wade Street, for Messrs. J. Marsland and Sons, Ltd.; additions, Caspian Wharf, Violet Road, for Anglo-American Oil Co., Ltd.; oil wharf, rear of 161 St. Leonard's Street, for British Petroleum Co., Ltd.; additions, "General Havelock" public-house, St. Leonard's Street, for Mr. W. Stewart.

Plans passed by the ILFORD Corporation: Mortuary block, King George Hospital, Hatch Lane, for Messrs. C. J. Dawson, Son and Allardyce; ten houses, Victoria Parade, Cranbrook Road, for Suburban Developments (London), Ltd.; thirteen houses, Redbridge Lane, for Messrs. C. J. Kemp and Sons; thirteen houses, Brancaster Road, for Messrs. Baskett and Brown; forty-seven houses, Widdecombe Gardens, for Mr. T. Anders; sixteen houses, Newbury Road, for Mr. R. Shipperd; three houses, Levett Gardens, for Messrs. J. W. Moore and Son, Ltd.; bank, Cranbrook Road, for Mr. G. Hamblin Fox; six houses, Buntingbridge Road, for Mr. E. Meredith; additions, Smith Motors, High Road, for Messrs. Haines and Warwick, Ltd.; four houses, shops and garages, Green Lane, for Mr. A. Smith; fourteen houses, Danehurst Gardens, for Mr. W. M. Knight; engineer's shop and boiler house, Metropolitan Cable Works, Grove Road, for Mr. F. Smith; forty-three houses, Middleton Gardens, for Suburban Developments, Ltd.; twenty-four houses, Fencepiece Road, for Messrs. Haines and Warwick; twenty houses, Sandringham Gardens, for Mr. J. Aldrige; warehouse, High Road, for Messrs. Cakebread, Robey & Co., Ltd.; boiler-house, Cranbrook Road, for Messrs. Holliday and Greenwood.

SOUTHERN COUNTIES

The BRIGHTON Corporation has allocated ten acres of land on the Bevendean estate for a housing scheme.

The OXFORD Corporation has obtained sanction to borrow £114,700 for the erection of houses on the South Parks Estate.

The GRAVESEND Corporation Housing Committee recommends preparing a scheme for the erection of forty parlour-type houses at King's Drive, on the King's Farm estate.

The GUILDFORD Corporation has passed plans submitted by Mr. A. C. Burlingham for the development of a new estate at Ganghill Copse, London Road.

The GUILDFORD Corporation Baths Committee is considering a site in Stoke Park, adjoining the river, for the purpose of the construction of an open-air swimming bath.



The Juvenile Court, Birmingham. Designed by Peacock and Bewlay. The façades to Newton Street and Steelhouse Lane (left), and the cloistered approach to the court room (right). The building, which was presented to the city by Mr. and Mrs. Barrow Cadbury, is the first of its kind to be erected in this country.



The Juvenile Court, Birmingham. Designed by Peacock and Bewlay. A view of the court room. Everything has been done both in the design and equipment of the interior to avoid the usual sombre and forbidding atmosphere of a police court.

Messrs. Clayton and Black have prepared revised plans for the proposed hotel at Dykes estate, BRIGHTON, at an estimated cost of £12,600. They have also prepared plans on behalf of the Brighton Marine Palace and Pier Co., Ltd., for widening and improving the pier entrance. The cost is estimated at about £6,000.

Plans passed by the GRAVESEND Corporation: Nine houses, North Ridge Road, for Mr. E. H. Morris; four garages and store, Brewhouse Yard, for Messrs. C. and E. Gilbert; four houses, Salisbury Road, for Mr. W. Gould; convenience, Canal Road, for Messrs. W. R. Barton and Son, Ltd.; additions, "Norfolk Arms" public-house, Norfolk Road, for Messrs. Charrington & Co., Ltd.

Plans passed by the HERNE BAY U.D.C.: Bungalow, Grand Drive, for Messrs. Goodwin and Russell, Ltd.; two houses, Fleetwood Avenue, for Messrs. Woolf Bros.; bungalow, Douglas Road, for Messrs. J. Howell and Son; two houses, Bournemouth Drive, for Mr. G. H. R. Griggs; bungalow, Pier Avenue, for Messrs. Goodwin and Russell, Ltd.

Plans passed by the FARNHAM U.D.C.: Bank, West Street, for Mr. A. J. Steadman, for Barclays Bank, Ltd.; cottage, Shortheath, for Messrs. Falkner and Aylwin, for Major Wallace; cottage, Runfold, for Mr. N. Wilkinson; houses, Boundstone Road, Rowledge, for Mr. A. J. Lehman; house, Arthur Road, for Messrs. Baigent and Sons; shop, Wrecclesham, for Messrs. Timms and Elsmore.

Plans passed by the OXFORD Corporation: House, Stratfield Road, for Mr. J. Parsons; house, Church Lane, Headington, for Mr. Wheeler; garage and workshop, Cowley Marsh, for Mr. G. C. Pipkin; sports pavilion, Woodstock Road, for Osberton Radiator Works; additions to "Carpenters' Arms," Hockmore Street, and to "King's Arms," Summertown, for the licensees; buildings, Edgeway Road, Marston, for the University.

Plans passed by the PORTSMOUTH Corporation: Factory, Basin Street, for Portsea Island Mutual Co-operative Society, Ltd.; business premises and flats, Copnor Road, for Mr. C. W. Stigant; store, 219 Milton Road, for Mr. A. Sirett; additions, 4 Crown Street, for Portsmouth Electricity Department; three shops, High Street, Cosham, for Mr. L. Horsey; business premises, London Road and Stubbington Avenue, for Messrs. Melaine; two houses, Goldsmith Avenue, for Messrs. Cake and McPherson; eight houses, Compton Road, for Mr. H. E. Collins; garages, Goldsmith Avenue and Frogmore Road, for Messrs. Evans & Co.; shop and showroom, 259 Fratton Road, for Messrs. Chaplen and Wade; business premises, High Street, Cosham, for Mr. W. F. Coles.

Plans passed by the OXFORD Corporation: House, Botley Road, for Mr. A. Smith; office, Walton Well Road, for Messrs. Stevens & Co.; house and shop, London Road, for Mr. E. S. Bourton; house, London Road, Headington, for Mrs. A. S. Ingram; office, adjoining 58 High Street, Cowley, for Messrs. Stevens & Co.; additions, "King's Arms," Banbury Road, Summertown, for Hall's Oxford Brewery, Ltd.; alterations, "The Cricketers' Arms," Iffley Road, for Messrs. Morland & Co.; bungalow, High Street, Wolvercote, for Mr. E. Rawlins; house, Sandfield Road, Headington, for The Manor Estate Co.; two houses, Binsey Lane, for Mr. D. Mealing; house, Woodstock Road, for Mr. R. P. Capel; house and shop, Ashgrove Avenue, for Mr. A. Pontin; extensions, rear of 33 St. Aldate's Street, for Messrs. Fox, Jones & Co.; extensions, "Crown and Thistle" Inn, Old Headington, for Mr. J. H. Morrell; house, Squitchey Lane, Summertown, for Mr. C. H. Payne; house, Woodstock Road, for Mr. F. S. Darwin; repair shop and destructor plant, Town Planning Road, Cowley, for Messrs. Morris Motors, Ltd.; house, Stephen Road, Headington, for Mr. Coppock; house and shop, London Road, Headington, for Mr. E. G. Burton.

SOUTH-WESTERN COUNTIES

Plans passed by the PAIGNTON U.D.C.: Bungalow, The Grove, Yalberton, for Mr. J. H. Maunder; five houses, Warefield Road, Steartfield, for Messrs. Willcocks and Barnes; two houses, Tweenaways, Totnes Road, for Messrs. Knapman Bros.; bungalow, Winner Hill Road, for Mr. G. Endicott; four flats and garages, Manor Road, for Mr. H. Smith; house, Winsu Avenue, for Messrs. A. Kellow and Son; two shops, St. Michael's Road, for Mr. W. G. Tancock; bungalow, Crabbs Park Estate, Dartmouth Road, for Mr. J. W. Glenwright.

NORTHERN COUNTIES

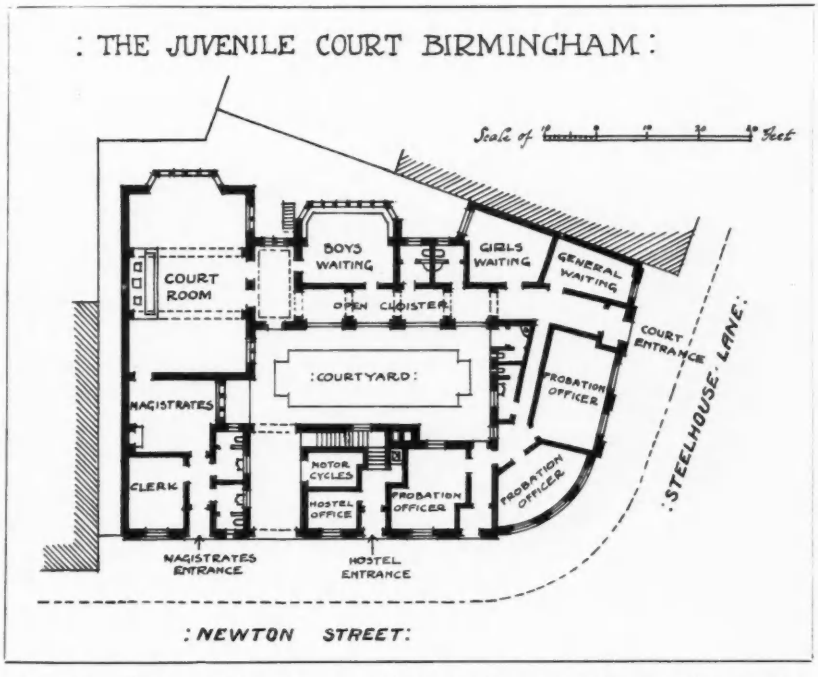
The BOLTON Corporation is to obtain land at the junction of Oakenbottom Road, as a site for a branch library.

The BRADFORD Education Committee has approved plans of the city architect for a new school proposed to be erected on the Eccleshill housing estate.

Plans passed by the MORECAMBE Corporation: Extensions to works, garage and store, for Messrs. Souplex, Ltd.; two houses, Mount Avenue, for Mr. A. Relph; two houses, Twemlow Parade, for Messrs. Jackson and Bowker; garage, Beach Street, for Morecambe and Lancaster Steam Laundry; two houses, Tibicar Lane, for Mr. F. Obank; houses, Balmoral Road, for Mr. Huddleston; house, Hall Drive, for Messrs. H. Hillman and Son; house, Schola Green Lane, for Mr. T. Snowden; two houses, Twemlow Parade, for Mr. F. Obank; house, Heysham Road, for Mr. R. Kitchen; two bungalows, Bare Lane, for Mr. H. L. Moody; shop, Alexandra Road, for Mr. S. M. Lund; extension to warehouse, Devonshire Road, for Mr. H. T. Walker.

MISCELLANEOUS

ST. HELENS (L.O.W.) Council has prepared a scheme for the construction of a marine drive, the estimated cost of which is £100,000.



The Juvenile Court, Birmingham. Designed by Peacock and Bewlay. Ground-floor plan. In addition to the court room, there are rooms for the magistrates and probation officers and also waiting rooms for young offenders. On the upper floors a girls' hostel has been provided.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abercavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7	1 2½
B_1	EAST-BOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke ..	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1*s.* 4*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; NAVVY, 1*s.* 4*d. per hour*; TIMBERMAN, 1*s.* 5½*d. per hour*; SCAFFOLDER, 1*s.* 5*d. per hour*; WATCHMAN, 7*s.* 6*d. per shift.*

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 10 0
Pit gravel, per yd.	0 15 0
Pit sand, per yd.	0 12 6
Washed sand, per yd.	0 13 0
Screened ballast or gravel, add 10 per cent. per yd.	
Clinker, breeze, etc., prices according to locality.	
Portland cement, per ton	£2 8 0
Lias lime, per ton	2 0 0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.	
Transport hire per day:	
Cart and horse £1 3 0 *Trailer*	£0 15 0
3-ton motor lorry 3 15 0 *Steam roller*	4 5 0
Steam lorry, 5-ton 4 0 0 *Water cart*	1 5 0
EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube	0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.	
In stiff clay, add 30 per cent.	
In underpinning, add 100 per cent.	
In rock, including blasting, add 225 per cent.	
If basketed out, add 80 per cent. to 150 per cent.	
Headings, including timbering, add 400 per cent.	
RETURN, fill, and ram, ordinary earth, per yd.	£0 1 6
SPREAD and level, including wheeling, per yd.	0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0 10 6
TRIMMING earth to slopes, per yd. sup.	0 0 6
HACKING up old grano. or similar paving, per yd. sup.	0 1 3
PLANKING to excavations, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.	
IF left in, add to above prices, per ft. cube	0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0 2 1
DO. 6 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube	2 3 0
DO. 6-2-1, per yd. cube	1 18 0
DO. in upper floors, add 15 per cent.	
DO. in reinforced-concrete work, add 20 per cent.	
DO. in underpinning, add 60 per cent.	
LIAS-LIME CONCRETE, per yd. cube	£1 16 0
BREEZE CONCRETE, per yd. cube	1 7 0
DO. in lintels, etc., per ft. cube	0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0 3 9
FINE concrete benching to bottom of manholes, per ft. cube	0 3 0
FINISHING surface of concrete spade face, per yd. sup.	0 0 9

DRAINER

LABOURER, 1*s.* 4*d. per hour*; TIMBERMAN, 1*s.* 5½*d. per hour*; BRICKLAYER, 1*s.* 9*d. per hour*; PLUMBER, 1*s.* 9*d. per hour*; WATCHMAN, 7*s.* 6*d. per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0 0 10
DO. *6 in., per ft.*	0 1 3
DO. *9 in., per ft.*	0 2 3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 5 6
DO. *6 in., per yd.*	0 8 0
Portland cement and sand, see "Excavator" above.	
Leadwool, per cwt.	£2 0 0
Gaskin, per lb.	0 0 4½
STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0 4 3
DO. 6 in., per ft.	0 5 0
DO. 9 in., per ft.	0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0 8 3
DO. 6 in., per ft.	0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.

Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1*s.* 9*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; SCAFFOLDER, 1*s.* 5*d. per hour.*

London stocks, per M.	£4 5 6
Flettons, per M.	2 12 6
White facing bricks, per M.	5 0 0
Multi-coloured facings, per M.	7 7 9
Best red facings, per M.	7 7 9
Rubbers, 9½ in., per M.	12 0 6
Staffordshire blue, per M.	9 5 0
Firebricks, 2½ in., per M.	9 5 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. *headers, per M.*	20 10 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	
Lime, grey stone, per ton	£2 11 6
Mixed lime mortar, per yd.	1 6 0
Dampcourse, in rolls of 4½ in., per roll	0 2 6
DO. *9 in. per roll*	0 4 9
DO. *14 in. per roll*	0 7 6
DO. *18 in. per roll*	0 9 6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32 0 0
DO. in cement do., per rod	34 10 0
DO. in stocks, add 25 per cent. per rod.	
DO. in blues, add 100 per cent. per rod.	
DO. circular on plan, add 12½ per cent. per rod.	
DO. in backing to masonry, add 12½ per cent. per rod.	
DO. in raising on old walls, etc., add 12½ per cent. per rod.	
DO. in underpinning, add 20 per cent. per rod.	
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0 1 0
BEDDING plates in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING do. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
DO. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
DO. picked stocks, per ft. sup. extra	0 0 7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side, per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in. per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around gullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

MASON

MASON, 1*s.* 9*d. per hour*; DO. *fixer*, 1*s.* 10*d. per hour*; LABOURER, 1*s.* 4*d.* per hour; SCAFFOLDER, 1*s.* 5*d. per hour.*

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 9
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 11 0
York templates sawn, per ft. cube	0 7 6
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	
HOISTING and setting stone, per ft. cube	£0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.	
PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup.	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do., per ft. run	0 1 4
HALF SAWING, per ft. sup.	0 1 0
Add to the foregoing prices, if in York stone, 35 per cent.	
DO. Mansfield, 12½ per cent.	
Deduct for Bath, 33⅓ per cent.	
DO. for Chilmark, 5 per cent.	
SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	£0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 7 6
YORK SILLS, W. & T., ft. cub. fixed	1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0 1 3
DO. 2½ in. thick, per ft. sup.	0 1 6

SLATER AND TILER

SLATER, 1*s.* 9*d. per hour*; TILER, 1*s.* 9*d. per hour*; SCAFFOLDER, 1*s.* 5*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies			£14 0 0
Countess			23 0 0
Duchess			32 10 0
Old Delabole	*Med. Grey*		*Med. Green*
24 in. × 12 in.	£42 11 3		£45 1 0
20 in. × 10 in.	31 4 3		33 0 6
16 in. × 10 in.	20 18 0		22 4 9
14 in. × 8 in.	12 1 0		12 16 3
Green Randoms, per ton			8 3 9
Grey-green do., per ton			7 3 9
Green peggies, 12 in. to 8 in. long, per ton			5 13 9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.			£0 0 6
Clips, copper, per lb.			0 2 0
Nails, compo, per cwt.			1 6 0
Nails, copper, per lb.			0 2 2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M			£5 18 0
Machine-made tiles, per M.			5 8 0
Westmorland slates, large, per ton			9 0 0
DO. *Peggies, per ton*			7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:			
Ladies, per square			£4 0 0
Countess, per square			4 5 0
Duchess, per square			4 10 0
WESTMORLAND, in diminishing courses, per square			6 5 0
CORNISH DO., per square			6 3 0
Add, if vertical, per square approx.			0 13 0
Add, if with copper nails, per square approx.			0 2 6
Double course at eaves, per ft. approx.			0 1 0
SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.			
	Med. Grey		Med. Green
24 in. × 12 in.	£5 0 0		£5 2 0
20 in. × 10 in.	5 5 0		5 10 0
16 in. × 10 in.	4 15 0		5 1 0
14 in. × 8 in.	4 10 0		4 15 0
Green randoms			6 7 0
Grey-green do.			5 9 0
Green peggies, 12 in. to 8 in. long			4 13 6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square			3 17 6
DO., machine-made do., per square			3 7 6
Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.			
FIXING lead soakers, per dozen			£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square			0 10 0
LABOUR only in laying slates, but including nails, per square			1 0 0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1*s.* 9*d. per hour*; JOINER, 1*s.* 9*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Timber, average prices at Docks, London Standard	
Scandinavian, etc. (equal to 2nds):	
7 × 3, per std.	£22 0 0
11 × 4, per std.	30 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 4 6
DO. *T. and G., 1 in., per sq.*	1 4 6
Planed boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 1 6
Mahogany, Honduras, per ft. sup. of 1 in.	0 1 4
DO. *Cuba, per ft. sup. of 1 in.*	0 2 6
DO., *African, per ft. sup.*	0 1 3
Teak, per ft. sup. of 1 in.	0 1 2
DO., *ft. cube*	0 14 0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 4 6
DO. framed in floors, roofs, etc., per ft. cube	0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube	0 8 6
PITCH PINE, add 33⅓ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO., 3-ply, per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0 0 4½
DO. 9 in. wide and over per ft. sup.	0 1 2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
DO. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour*; MATE, *do.* 1*s.* 4*d. per hour*; ERECTOR, 1*s.* 9½*d. per hour*; FITTER, 1*s.* 9½*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO.. in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour*; MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ⅜ in., per ft.	0	2	2
DO. ½ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ⅜ in., each	0	2	6
DO. ½ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in. per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* "	0	2	3
DO. *6 ft. sup.* "	0	2	6
DO. *20 ft. sup.* "	0	3	1
DO. *45 ft. sup.* "	0	3	3
DO. *65 ft. sup.* "	0	3	5
DO. *100 ft. sup.* "	0	3	10
Rough plate, ⅞ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; FRENCH POLISHER, 1*s.* 9*d. per hour*; PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	17	0
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall	0	4	3
Liquid driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall, and up	0	16	0
DO., *flat, per gall.*	0	16	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ¼ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	9½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, NOVEMBER 6

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Art Standing Committee and of the Board of Architectural Education Committee.

WESTMINSTER SCHOOL HALL (entrance in Dean's Yard). "Mystery Ships." By Rear-Admiral Gordon Campbell, V.C., D.S.O. Chairman, Viscount Burnham, G.C.M.G., C.H. Admission, 2s. 6d. **5.30 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Sessional Meeting. "Notes on Electric Warming, with special reference to Low Temperature Panel Systems," by R. Grierson, A.M.I.E.E., A.M.I.MECH.E. This meeting will take place at Swedenborg Hall, Hart Street, W.C.1. **7 p.m.**

ROYAL ARCHÆOLOGICAL INSTITUTE. At the Society of Antiquaries, Burlington House, W. "The Archæological Aspect of the Goidelic Question: A Critical Survey of the Bronze and Early Iron Age of Ireland." By Dr. Adolf Mahr. (Lantern Illustrations.) **5 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Inaugural meeting of the one hundred and seventy-sixth session of the Society and the presentation of the medals awarded during the Session 1928-29. Address by the Chairman of the Council, Llewelyn B. Atkinson, M.I.E.E., A.M.INST.C.E., on "Fifty Years of Electrical Science and Industry." **8.30 p.m.**

THURSDAY, NOVEMBER 7

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. **7 p.m.**

R.I.B.A., 9 Conduit Street, W.1 Meetings of the Board of Architectural Education Committee and of the Board of Architectural Education Prizes and Scholarships Committee.

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "The Restoration of an Ancient Castle to Modern Use." By Sir Charles Allom, F.R.S.A. **7.30 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Third of a course of eight Public Lectures. "Olympia." Dr. Ernest A. Gardner. **5 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Lead Work." By Sir Lawrence Weaver, K.B.E., F.S.A. This lecture will be given in the Lecture Theatre of the Museum. **5.30—6.30 p.m.**

FRIDAY, NOVEMBER 8

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Modern Incandescent Lighting in Kinema Studios," by W. H. Villiers and S. G. Double. **7 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Intermediate Examination until Thursday, November 14.

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Coal and its Combustion." By Andrew McCulloch, M.SC.TECH.A.I.C. **7 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. "The Indian Cinema Industry." By A. M. Green, I.C.S., Acting Trade Commissioner for India. Dr. T. Drummond Shiels, M.C., M.P., Parliamentary Under-Secretary of State for India, will preside. **4.30 p.m.**

SATURDAY, NOVEMBER 9

Sunrise, 7.6. Sunset, 4.21

BRITISH INSTITUTE OF INDUSTRIAL ART. At the Victoria and Albert Museum, South Kensington, S.W.7. Autumn exhibition of British Industrial Art for the Slender Purse. 10 a.m. till 5 p.m. Thursdays and Saturdays till 9 p.m. Sundays, 2.30 p.m. till 6 p.m. **10 a.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to India House, Aldwych. Architect, Sir Herbert Baker, A.R.A., F.R.I.B.A. Meet at India House, at 2.45 p.m. **2.45 p.m.**

MONDAY, NOVEMBER 11

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Informal Meeting. **7 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Debate, "Panel versus Direct Heating." This meeting will take place at the Borough Polytechnic, Borough Road, Southwark, S.E.1., 7 p.m. Light refreshments, 6.30 p.m. **6.30 p.m.**

TUESDAY, NOVEMBER 12

INCORPORATED INSTITUTE OF BRITISH DECORATORS. At Painters' Hall, Little Trinity Lane, E.C.4. "Expression; One Aspect of Design of Importance to the Decorator," by J. M. Holmes. 8 p.m. Reception, 7.30 **7.30 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Visit to Carreras Factory, Hampstead Road, N.W.1. Meet at main entrance at 2.45 p.m. **2.45 p.m.**

UNIVERSITY OF LONDON, UNIVERSITY COLLEGE, Gower Street, W.C.1. "Engineering Management." First of a Course of three Public Lectures by Mr. E. T. Elbourne, M.B.E., A.M.I.MECH.E. **6.30 p.m.**

WEDNESDAY, NOVEMBER 13

WESTMINSTER SCHOOL HALL (entrance in Dean's Yard). "My Solo Flight to Australia." By Squadron-Leader Hinkler, A.F.C., F.S.M., R.A.A.F. Chairman, Col. The Master of Sempill, A.F.C. **5.30 p.m.**

THURSDAY, NOVEMBER 14

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Science Standing Committee.

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "Woodworking Machinery." By Stafford Ransome, M.INST.C.E. **7.30 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Fourth of a course of eight Public Lectures. "Delos." Dr. Ernest A. Gardner. **5 p.m.**

THURSDAY, NOVEMBER 14—*Continued.*

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "New Underground Railway Offices, St. James' Park—Notes on Foundations and Erection," by M. J. C. McCarthy, A.M.INST.C.E., A.M.I.MECH.E. (Member). **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "The Windows of a Medieval Church, and their Treatment as a Pictorial Scheme" (with illustrations from Great Malvern Priory). By G. McN. Rushforth, R.S.A. **5.30—6.30 p.m.**

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. Meeting to be held at Caxton Hall, S.W.1. "The Manufacture and Standardisation of Eye-protective Glasses." By Dr. W. M. Hampton, B.SC. **7.30 p.m.**

FRIDAY, NOVEMBER 15

THE ARCHITECTURE CLUB. Sixteenth annual dinner at the Savoy Hotel. 7.15 for 7.30. **7.30 p.m.**

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. "Romance of Lead in Industry." By E. Holden, F.COLL.H. **3 p.m.**

MORLEY COLLEGE, Westminster Bridge Road, S.E.1. "Housing." By E. D. Simon, M.P. **8 p.m.**

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Smoke and Health." By John S. Taylor, M.D., D.P.H.

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. At the Town Hall, Carlisle. Sessional Meeting. Discussion on "Town Planning of Built-Up Areas," to be opened by Percy Dalton, A.M.INST.C.E., A.R.I.B.A. **7.30 p.m.**

SATURDAY, NOVEMBER 16

Sunrise, 7.19. Sunset, 4.10.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Informal Visit to Houses of Parliament. Meet at Norman Porch, Victoria Tower, at 2.30 p.m. **2.30 p.m.**

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. At Carlisle: visits to the premises of the Nestlé and Anglo-Swiss Condensed Milk Co., the City of Carlisle New Electricity Works, the New Gas Works, and the new housing schemes of the Carlisle Corporation. Meet at the Town Hall at 9.30 a.m. **9.30 a.m.**

MONDAY, NOVEMBER 18

R.I.B.A., 9 Conduit Street, W.1. Meeting of Executive Committee. 4 p.m. General Meeting, with Paper by Alan E. Munby, M.A., F.R.I.B.A., on "The Design of Science Buildings." 8 p.m. Exhibition of the Work of the late Bertram Goodhue, until November 30. Open daily, between 10 a.m. and 8 p.m., Saturdays 5 p.m. Licentiate Examination to qualify for nomination for Fellowship until Friday, November 22. **4 p.m.**

TUESDAY, NOVEMBER 19

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Ordinary Meeting. **6 p.m.**

WEDNESDAY, NOVEMBER 20

WESTMINSTER CITY SCHOOL, Palace Street, Victoria Street, S.W.1. "My Experiences of Magic in West Africa." By Lady Dorothy Mills. **5.30 p.m.**

THURSDAY, NOVEMBER 21

THE GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "Mouldings—Their Proportion and Place in Design." By E. J. Warne. **7 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Fourth of a course of eight Public Lectures. "Delphi." By Ernest A. Gardner. **5 p.m.**

NORTHERN POLYTECHNIC, Holloway, N.7. "Modern Architecture." By Howard Robertson, S.A.D.G., F.R.I.B.A. **7 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "The Van Eycks." By Maurice W. Brockwell. **5.30—6.30 p.m.**

FRIDAY, NOVEMBER 22

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Smokeless Fuels." By William Gibson, M.SC.TECH.A.I.C. **7 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee.

MONDAY, NOVEMBER 25

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "The A.A. Excursion to Germany." By E. R. Jarrett, A.R.I.B.A. **8 p.m.**

WEDNESDAY, NOVEMBER 27

WESTMINSTER CITY SCHOOL, Palace Street, S.W.1. "By Car From Nile to Niger and Across the Sahara." By Owen Tweedy. **5.30 p.m.**

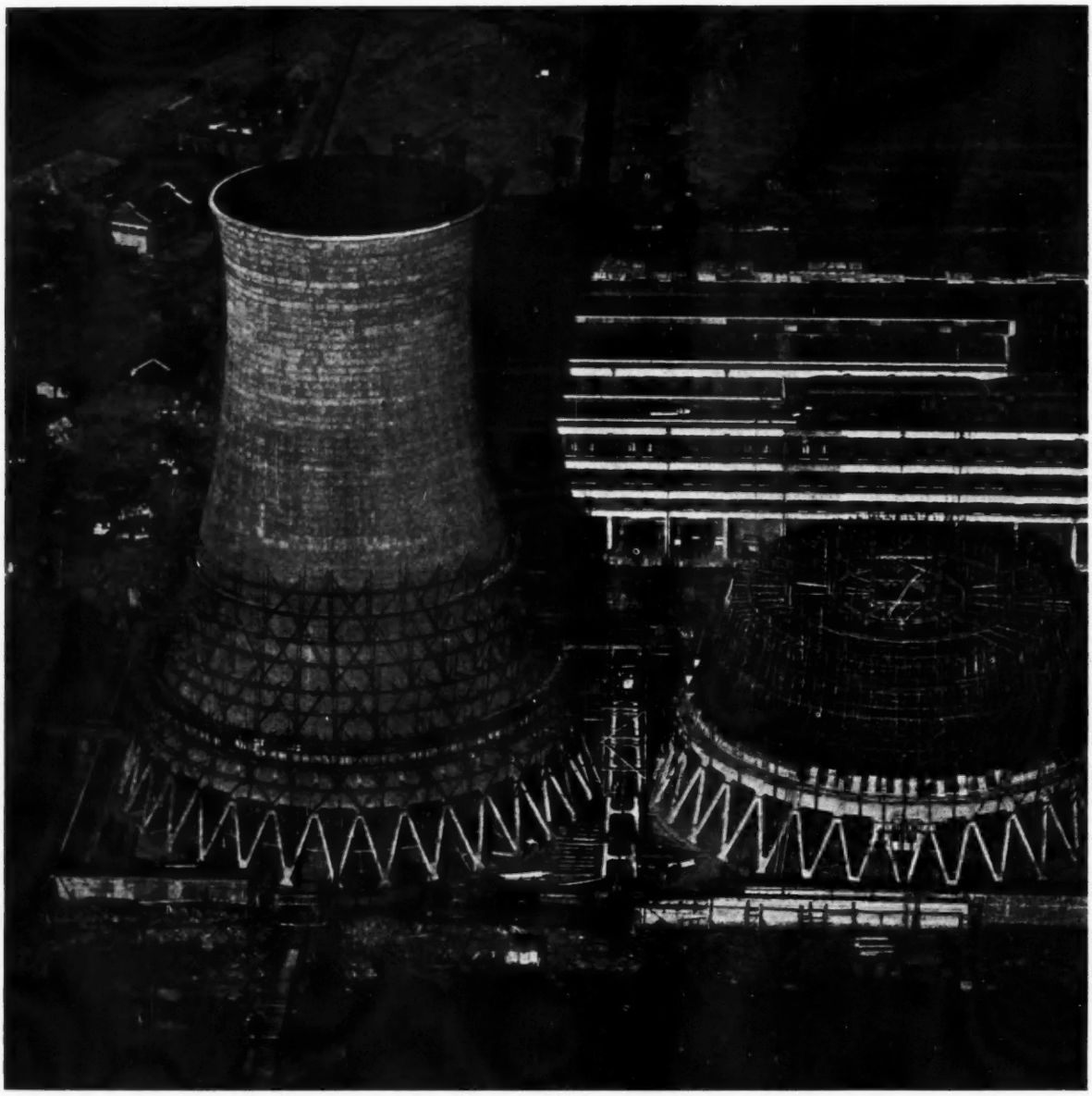
THURSDAY, NOVEMBER 28

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee.

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Fifth of a course of eight Public Lectures. "Eleusis." By Dr. Ernest A. Gardner. **5 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Painters of the Norwich School." By Mr. S. C. Kaines Smith, M.B.E. **5.30—6.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Notes on the Foundation of a New Thames-side Warehouse." By T. F. Burns, A.M.INST.C.E. (Associate Member). **6.30 p.m.**



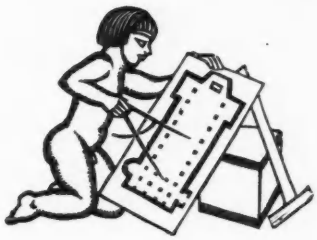
TOWERS OF TEMPERATURE:

BIRMINGHAM'S NEW POWER STATION FROM THE AIR

This pair of conspicuous cooling towers—one shown in the early stages of construction—form an essential part of the equipment of the new Hams Hall Power Station of the Electricity Department of the City of Birmingham, to be opened officially today by the Duke and Duchess of York. It is about nine miles from the city, and is classed as a base load station under the scheme of the Central Electricity Branch. The capacity of the present generating plant is 60,000 kw., and room has been provided in the buildings for further plant of 30,000 kw. capacity. There is ample accommodation on the site, which is situated in the open country, and it is proposed, ultimately, practically to duplicate the present station.

The unusual view shown gives prominence to the towers for cooling the condenser circulating water, accentuated by the absence of the lofty chimney-stack hitherto associated with the words "power station." They are constructed of concrete, and are 168 ft. in diameter at the base, with a height of 210 ft. from the pond coping level. The power-house building itself is of steel framework, with brick, concrete and reconstructed stone filling.

THE ARCHITECTS' JOURNAL



WEDNESDAY, NOVEMBER 6, 1929

A STRANGE CASE AT NOTTINGHAM

"At the Nottingham Summons Court, a case was brought by the Corporation against the owners, for erecting certain buildings otherwise than as approved by the Corporation."

NOTTINGHAM GUARDIAN.

WITHIN the last few weeks there has occurred at Nottingham an instance of municipal intervention in matters architectural which raises such important questions of policy that it deserves to be carefully examined. Any evidence that a Local Authority is taking steps to uphold a high standard of architecture in the locality over which it has jurisdiction will naturally be welcomed by everybody who desires that æsthetic control should become a reality.

There is no element in architecture which is so readily subject to bureaucratic enactment as is the height of buildings. It has generally been assumed, however, that a Local Authority is especially concerned to exercise a veto upon excessive heights of buildings, but we learn that a man may incur the displeasure of the municipality if the structure for which he is responsible is not high enough.

This has just happened at Nottingham, where, in St. John Street, an inn called "The Old Plough" was required to be rebuilt on the occasion of the constructing of a new by-pass road. The Local Authority approved of the plans, which were submitted for a three-story building, but eventually a building of only two stories was erected; whereupon it was complained by the Corporation that the new inn was not in conformity with the design of the neighbouring buildings and would have the effect of spoiling the layout of the street.

In the opinion of learned counsel employed by the Corporation, to acquiesce in the continued existence of this building, which presumed to be lower than those adjacent to it, would be to surrender architectural ideals and to revert to "the old higgledy-piggledy way." In reply to this, learned counsel for the defence asked whether the Corporation could compel a man to carry a building to a height for which he had no business need and which would cost a sum of money that would give him no economic return. In many cases it would be an unwarrantable interference with the liberty of the individual if he had to reckon with insistence that a building owner who is willing to pay the ground rent upon a valuable site must necessarily build up to the limit of height permitted by the bylaws. Reasons of public health make it undesirable that the Local Authority should allow the erection of a street building which exceeds a certain height, and thus deprive neighbouring houses of light and ventilation. But there is no dictate of hygiene which would justify an insistence that a building should necessarily be of a certain minimum height.

If the injunction to build high is based on æsthetic canons, then it is desirable to show that the appearance of the street will be seriously damaged by the omission of one particular building to attain the "standard" height. Before coming to a conclusion on this point, it is necessary to draw a sharp distinction between a formal street, in which a repetitive pattern has been agreed upon, not to be departed from without grievous harm to the composition as a whole, and the kind of street where the façades, although contiguous, are of multifarious design. To insist upon a uniform height of street buildings, so far from propagating æsthetic requirements, may, on the contrary, prove injurious to a city. It may lead to a quite unintelligent monotony which does not contribute to the grand effect that may be produced within the limits of a formal terrace.

Moreover, and this is a very important point, it may be difficult to establish that in any one quarter of a town there need always be a sufficient concentration of business to justify the erection of the maximum number of buildings all of the maximum height which the bylaws would permit.

In the case at Nottingham, however, judgment was given in favour of the Corporation.

NEWS & TOPICS

THE R.I.B.A. AGAIN IN SESSION

SIR BANISTER FLETCHER, the new president of the R.I.B.A., delivered his inaugural address at the commencement of the ninety-sixth session of the Royal Institute on Monday night last. He is the thirty-third president of the Institute, and his address, like those of his predecessors, had of necessity to include some reflections on the activities of the past year and an appreciation of the possibilities of the present. The events of the year have been more than usual, both in number and importance. Among the more outstanding were the adoption of the Council's proposals for the development of the Institute, the acquisition of a site in Portland Place upon which to erect new headquarters, from designs to be secured in open competition, the endowment of the Rome Scholarship, and the foundation of the R.I.B.A. Athens Bursary. "I have heard it whispered," said Sir Banister, "that some of the younger men think it a waste of time to go to Athens and Rome to study the architecture of the past, that an architect has nothing to learn there, and that the less he knows about ancient art the more unhampered will be his development." It seems to me, like it did to Sir Banister, that an open mind is likely to prove to be an empty mind.

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It is very pleasant to hear of the number of fine buildings which have been erected by members during the past year, as these indicate the prosperous condition of architecture at the present time. Sir Banister regards it as an undoubted fact that never has better architectural talent been available for carrying out the various types of building required for public and social service under our complex civilization, when so many factors such as noise, acoustics and vibration have to be considered. Be that as it may, I think most people will agree with him that the complexity of existing conditions is the kernel of the problem of the difficulties in building to-day.

THE STATUS OF ARCHITECTS AND ENGINEERS

The relationship between architects and engineers becomes ever more and more difficult to define. Members of these two professions in England cannot but be interested in a legal decision arrived at in New York State by which it is decreed that plans for buildings may be filed only by the owner or architect. No provision is made for the filing of plans by engineers, and many engineers, notably those whose chief occupation is in building construction work, consider this to imply a degradation of their status. In New York State the Architects' License Law defines an architect as "one who designs plans for structures and supervises their construction," and the Engineers' License Law defines an engineer as "one who holds himself out as able to do, or does, the work that an engineer does in planning, designing, constructing, inspecting and supervising engineering work, or appliances involved in public or private projects, or in making investigations for proposed engineering projects." The American engineers have little real cause for offence, for it is but natural that the municipal authority, when dealing with architecture, should wish to have the plans of new buildings presented to it by an architect.

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It can scarcely be questioned that no matter how skilled an engineer may be, he has elaborately trained himself to become a master of but one of the many aspects of building, namely, the constructional. If he is an expert in that particular field, architects in all humility will seek his advice. But it is unlikely that the same person could have the capacity to plan a building well, as an harmonious architectural whole, and also the technical knowledge which is required for designing in steel and reinforced concrete. Architects acknowledge that they can seldom have complete competence in this latter respect, and there appears to be no reason why engineers should claim to possess qualities which can only be acquired by an architectural training.

TOWNS SHOWN IN BLACK

It is a peculiar fact, and one not devoid of a sort of ironic humour, that the centre of every town-planning map is outlined in black. Towards this centre tends the whole system, nervous and circulatory, of roads and railways—and the centre is dead, edged in black, non-existent, untouchable. It is true to say that town planning has only received recognition after the process of ignorant expansion had already left the towns hopelessly engulfed in a morass of incredibly ugly suburbs. In these live the bulk of the people, practically unaffected by the very real activity of the town planners, spread out over still wider fronts along the fringes of the retreating countryside. Their attacks, thrown out in zones of houses—12, 8 and 4 to the acre, will soon reach a point when they damage more country than they save.

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It is high time that the war be carried into the town again. It is time that the "built-upon" areas should be straightened and cleared, and made decent and beautiful. Professor Abercrombie has been speaking of town planning in Belfast to hasten the day when towns may be re-planned. "Without this," he said, "the powers of town planning have only one-third or one-half of their value."

FATAL ACCIDENTS IN DEMOLITION

Dr. F. J. Waldo, the City of London Coroner, in his annual report, reviews the question of the supervision of demolitions and alteration of old buildings. Three deaths occurred in the year: one being that of a workman on the Bank of England, and the others two victims of the collapse of an old public-house in process of alteration. It is hard to know what form of legislation would prevent the death of a workman which was the direct result of a bad day's work some 100 years back; and as for the other, it seems not so much that the London Building Act needs strengthening as that the District Surveyor stands in need of assistance. In any case, no Act can require more of the builder than that he shore the old work securely before starting operations.

A WORSHIPFUL PLUMBER

I am glad to see that the services of Mr. Hugh Davies, who recently retired from the position of Inspector of Technical Schools, especially concerned with the teaching of architecture and building, have been recognized by the Worshipful Company of Plumbers. He has recently been made Honorary Freeman and Honorary Liveryman of this Company in recognition of his services to the plumbing industry generally. Mr. Davies has been largely responsible for the annual conference of teachers of building subjects held in London in the summer, and for bringing



The corner building at Nottingham—"The Old Plough" inn—in respect of which the owners were recently summoned by the Corporation. One of the points at issue was its alleged deficiency in height.

the teachers to the Institute. This has formed a very valuable link between the architectural profession and technical schools throughout the country.

THE NOTTINGHAM CASE

The controversy over the "Old Plough" Inn, referred to in the leading article this week, is destined to be carried to a further stage. The owners have decided to appeal against the fine of £5 which was imposed. In order that my readers may be enabled to form their own opinion concerning the æsthetic aspect of the question, I publish a photograph of the new building. Few people would support the Corporation in contending that a street corner need have a building of height uniform with that of the adjacent ones. Of course, many instances may be found in which street buildings are so disposed, but there is very much to be said for making the corner building show a formal differentiation from its neighbours. This can be done by giving it the prominence due to increased height or the possession of some important architectural feature. An excellent instance of such a treatment may be found at the West extremity of Aldwych, where the domes of the Gaiety Theatre and of the building opposite decorate the street corners and make them extremely expressive. And there is no question that this is a much more satisfactory architectural treatment than that of the East extremity of Aldwych, where we find the junction of the crescent with the Strand is effected in a building which does not sufficiently differentiate itself from those on either side of it. Whether it is equally possible to obtain a satisfactory form of emphasis by making the corner building lower than its immediate neighbours is an interesting question of civic design.

It may perhaps be suggested that the building here illustrated is not altogether the best which might have been designed for its situation. Its fault, however, seems to lie not so much in its lack of height as in its defective æsthetic junctions with the façades on its right and left. But, however this may be, one cannot help suspecting that the Nottingham Corporation in protesting against this building, were not actuated by considerations of art alone, but were also concerned to increase the rateable value of the building erected upon the new thoroughfare. This is too large a problem to be discussed in a few sentences. It is worth remarking, however, that students of architecture and town planning would do well to take account of the most unfortunate circumstance that the Local Authorities imagine it to be in their interest to encourage the erection of taller buildings merely in order to obtain an enhanced revenue from rates. Let us hope that there is a fallacy in the argument, and that this fallacy may be detected and exposed before all the beautiful old buildings of only three or four stories high have been demolished.

TO GARAGING "MOTH"—2s. 4d.

If, by any chance, you are taking the Moth over to Central Europe this week-end, it will cost you less to garage it for the night at Budapest—

Unfolded: 3s. 9d.
Folded: 2s. 4d.

Only a little more, or is it even less, than the garage fee for the car? Progress does carry us along so. People have been complaining at the high charges at Budapest. It appears that they only charge 2s. 6d. in England, or less, unfolded. Architects, the flat roof is at hand!

ASTRAGAL

THE ROYAL GOLD MEDALLIST: PERCY S. WORTHINGTON

BY A. TRYSTAN EDWARDS

THE nomination for the Royal Gold Medal by the Council of the R.I.B.A. is an event into which we seek to read a special meaning. It is generally assumed that the medal carries the significance of an official certificate of merit to some practitioner who has already won his laurels, and if this is so, the medal corresponds to an honorary degree at a University. If this analogy is correct, the question arises as to whether the award serves the best purpose in the interests of the profession and of the art of architecture itself. Is there, perhaps, an element of excessive conservatism or even timidity in the policy of giving an additional pat on the back to an architect who has already won success and is scarcely in need of further encouragement? To this it may be replied that the Institute must necessarily be a conservative body and could not with propriety take the risk of recommending the award of the highest certificate of merit to a youthful practitioner, however brilliant, who had as yet accomplished but a small body of work. After all, there is no profession which offers such glittering prizes to youthful talent, for the competitive system is especially devised to enable unknown students of architecture to come to the forefront if they deserve to do so.



Offices for the London and Liverpool and Globe Insurance Company, Manchester. Designed by Percy S. Worthington.

The Royal Gold Medal does, in fact, enable the Institute to consolidate its position in the profession by paying special compliments to eminent practitioners and, furthermore, it provides an opportunity to do honour to foreign architects. There is no doubt that these latter value very highly the distinction of receiving the Royal Gold Medal, and on the occasions when the award goes to a foreigner the Institute has the satisfaction of serving the highest objects of international accord.

During the period which has elapsed since the Armistice four foreign architects have been singled out for recognition —namely, Victor Laloux, Ragnar Ostberg, Thomas Hastings, and Gerault. Other recipients of the medal have been Guy Dawber, Sir Herbert Baker, Sir Giles Gilbert Scott, Sir John Burnet, Sir Edwin Lutyens, and Leonard Stokes. Thus it is apparent that the Institute attaches the utmost importance to its formal recognition of the fact that architecture has no geographical boundaries. Of the English recipients of the honour it must be said that they could scarcely have been chosen otherwise.

The latest addition to the list is the honoured name of Percy Scott Worthington, and it is specially gratifying that on this occasion the award has gone to an architect whose main practice is in the provinces.

Percy Worthington is acknowledged by his confreres in Manchester to be one of the leading practitioners in that city, and, indeed, for many years he has been a tower of strength to the profession in the North of England, for his ripe wisdom and gifts of diplomacy are at the disposal of everybody who wishes to serve the cause of architecture.

Of his great achievements as an artist it is unnecessary to speak at length, because on many occasions readers of this JOURNAL have had an opportunity of seeing illustrations of his designs. The new Masonic Temple at Manchester by his firm was illustrated only a fortnight ago.

The Manchester University building is perhaps their most important work. This building has exerted a most beneficial influence upon his native city and came as a revelation



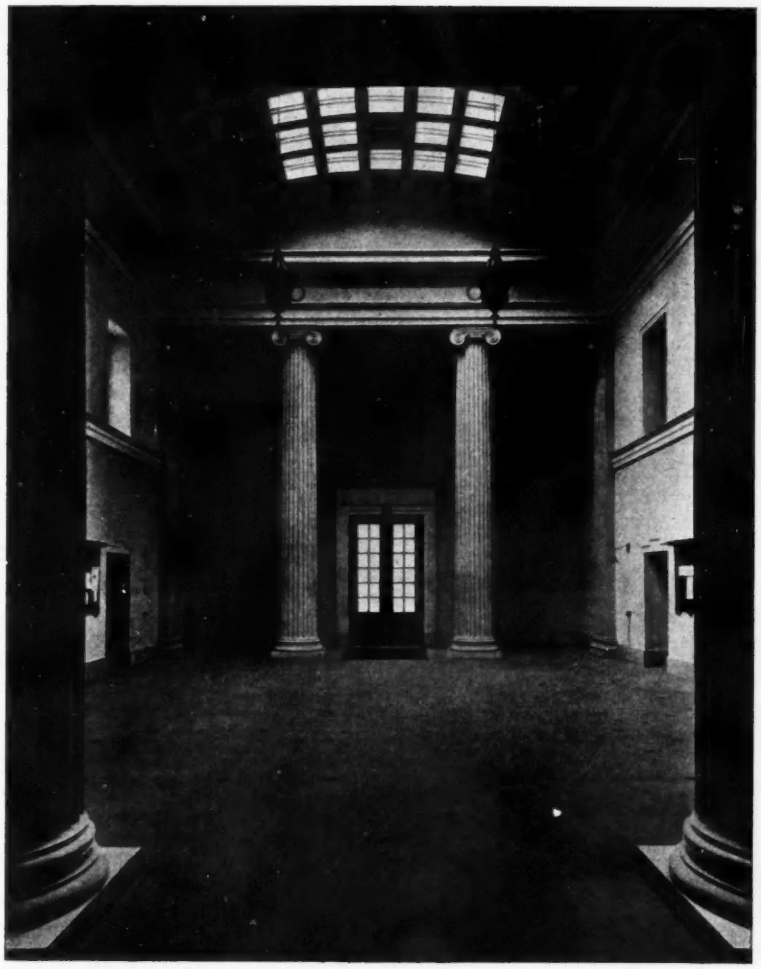
Stocktons, Alderley Edge, Cheshire. Designed by Percy Scott Worthington. The garden side.

to the industrial north, where, in modern times at least, the classic style has seldom been used with greater effect. The black, smoke-laden, meanly-designed industrial towns especially need the added dignity which elegant classic buildings seem alone able to supply. This one marked a definite reaction from the tradition of architectural fussiness which still lingered on from the Victorian era.

We illustrate aspects of three different types of design. In the Faculty of Arts building, Manchester University, we see the Ionic Order employed to give a noble scale to a hall. While many buildings erected at the present time are "beneath criticism," this design may be described as "*beyond* criticism"; it is so obviously good that there seems to be nothing more to be said about it. This is the kind of architecture which wears well—it will not be out of date in ten or twenty years' time. Its elegant simplicity, its entire freedom from vulgar elements, its pleasant spaciousness, must compel the admiration of everybody.

The second example is a street façade, again, of its kind, faultless. It seems difficult to imagine how a narrow corner frontage could have been better treated. Although the site is restricted, the building does not look in the least cramped, for it seems to fit its situation perfectly. In fact, the semicircular bay which monopolizes the whole façade has an imposing scale and is treated with architectural ceremony. The well-defined ground-floor story provides an adequate base to the building, while the entablature, with balustrade above in a most decorative manner, gives formal emphasis to its upper terminal. The intermediate portion of the façade is adorned by Corinthian pilasters which serve the æsthetic purpose of stabilizing its vertical dimension and increasing the scale of the building as a whole. It is customary in certain quarters to decry the use of the Order in these circumstances on the ground that the columns are doing no structural work. In this design, however, it is only necessary in imagination to do away with the pilasters in order to realize what an important part they play in binding the façade together.

The third illustration displays his special quality of artistic conservatism. Stocktons, Alderley Edge, Cheshire, is not a house of "sensational" design, but it is something far better—namely, a house which a man could live in, without ever getting tired of it.



A view of the main hall, looking towards the entrance doors, of the Faculty of Arts building, University of Manchester. Designed by Thomas Worthington and Sons.



Sun Life Assurance Building, London.] [*By Septimus Warwick.*

The Pall Mall East front of the British Administrative Offices of the Sun Life Assurance Company of Canada, which are also illustrated on the facing and subsequent pages. The building contains ten stories, three below and seven above the ground. In a prehistoric river-bed discovered in the foundations were Pleistocene mammalian and other remains. These are now in the British Museum.

A CANADIAN ASSURANCE COMPANY'S BRITISH HEADQUARTERS

Cockspur Street



Charing Cross

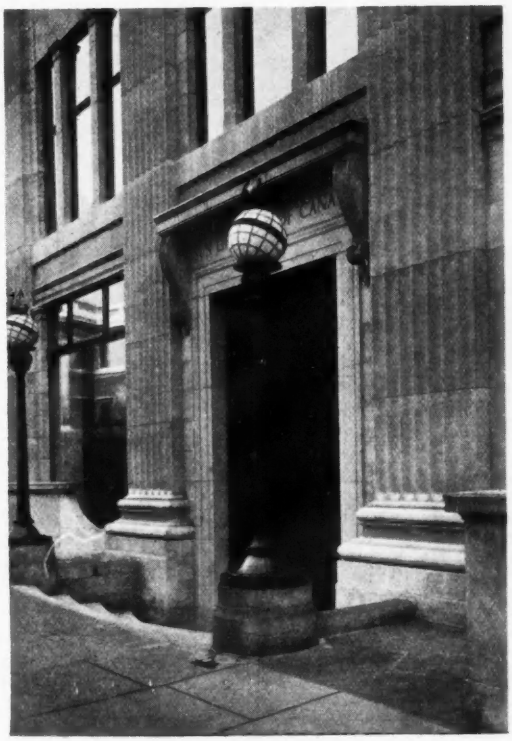
A view of the British Administrative Offices of the Sun Life Assurance Company of Canada, looking from Trafalgar Square along Cockspur Street. The new headquarters (the tall building shown to the left of the picture) are flanked on one side by the Canadian Government offices and on the other by comparatively new buildings. Note how the cornice and balustrading have been carried through from the Canadian Government offices, also the work of Mr. Septimus Warwick, into the Sun Life building.

DESIGNED BY SEPTIMUS WARWICK

THE Sun Life Assurance Company of Canada is older than the Dominion of Canada. Its charter was granted in 1865, two years before Confederation was accomplished. Its first policy was written in 1871, four years after the Dominion's birthday. In Great Britain the company, who have maintained an administrative office in London for thirty-five years, are housed in a new ten-story building, the subject of these notes, in Cockspur Street.

There are ten stories, three below and seven above the ground. The foundations were taken down to the blue clay stratum. On this low level rests the steel frame around which the building is constructed. With the exception of underpinning and retaining walls and pavement vaults, there is not a bearing wall in the structure.

There is no wood in the building. The floors are of tile, steel and concrete, finished in marble or linoleum. The partitions are made of terra-cotta blocks and brick. The doors and frames are made of hollow metal, and are strong, long wearing, and swing with the utmost ease. The picture rails and dado rails are also made of metal. So, too, are the window frames, and where there is the slightest possibility of fire the doors and windows are fitted with fire-resisting glass. The metal partitions, with the exception of the bronze, are of the same construction as the doors and are of standard unit lengths. They can be taken down easily and re-erected wherever desired. This allows of easy change in re-arranging and expanding the departments of the company.



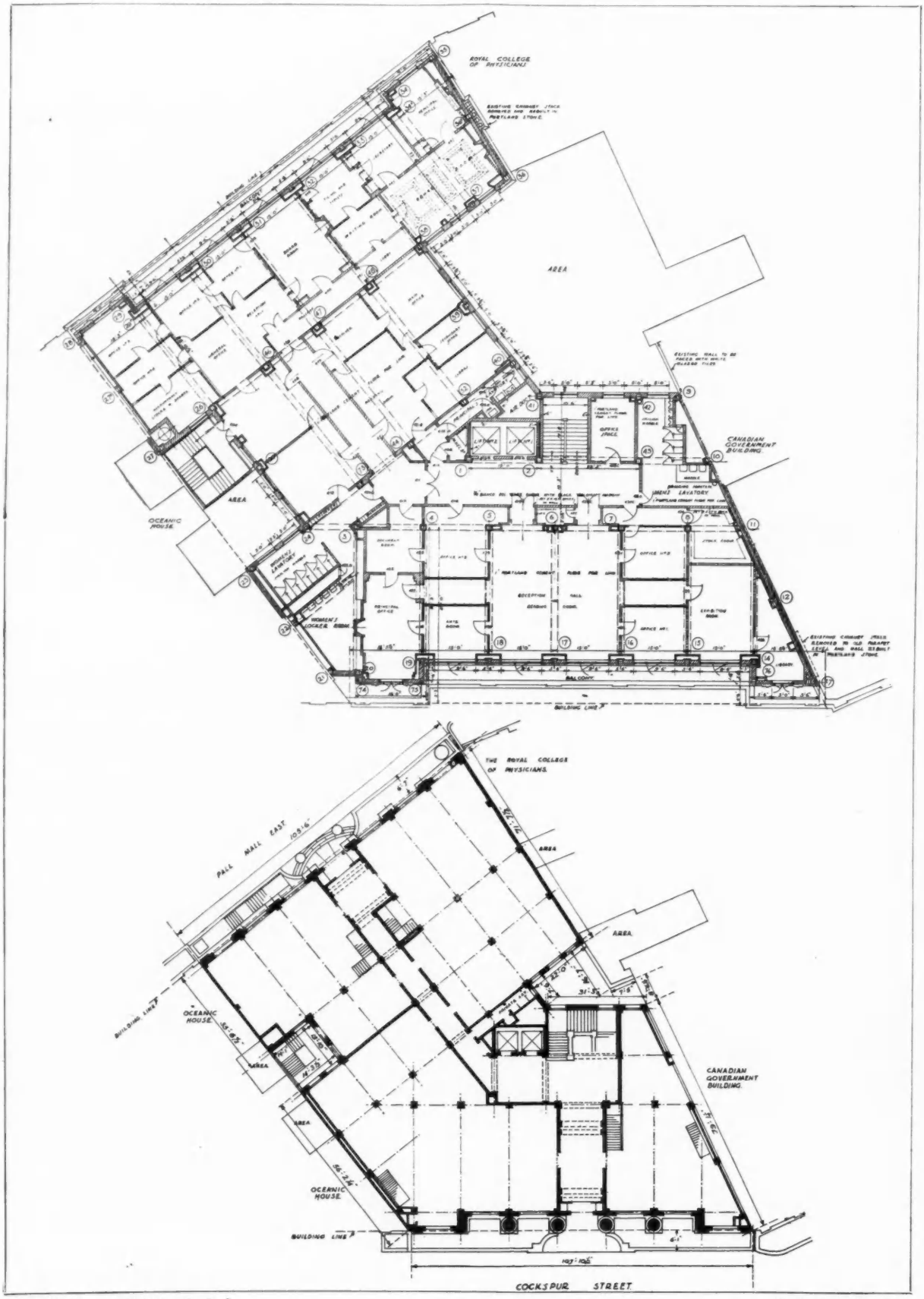
The entrance from Pall Mall East. The main entrance doors and the exterior lamp standards are of Canadian bronze, fabricated in Canada.

Electric light is distributed evenly, and with complete freedom from shadows. Electric clocks everywhere abound, being driven by a master clock in the switchboard room.

There is an independent system of lighting which functions automatically in the event of the failure of the main. The ceilings have been treated acoustically for the absorption of noise. A conversation can be carried on in low tones even on the first floor with windows open and traffic noises at their greatest.

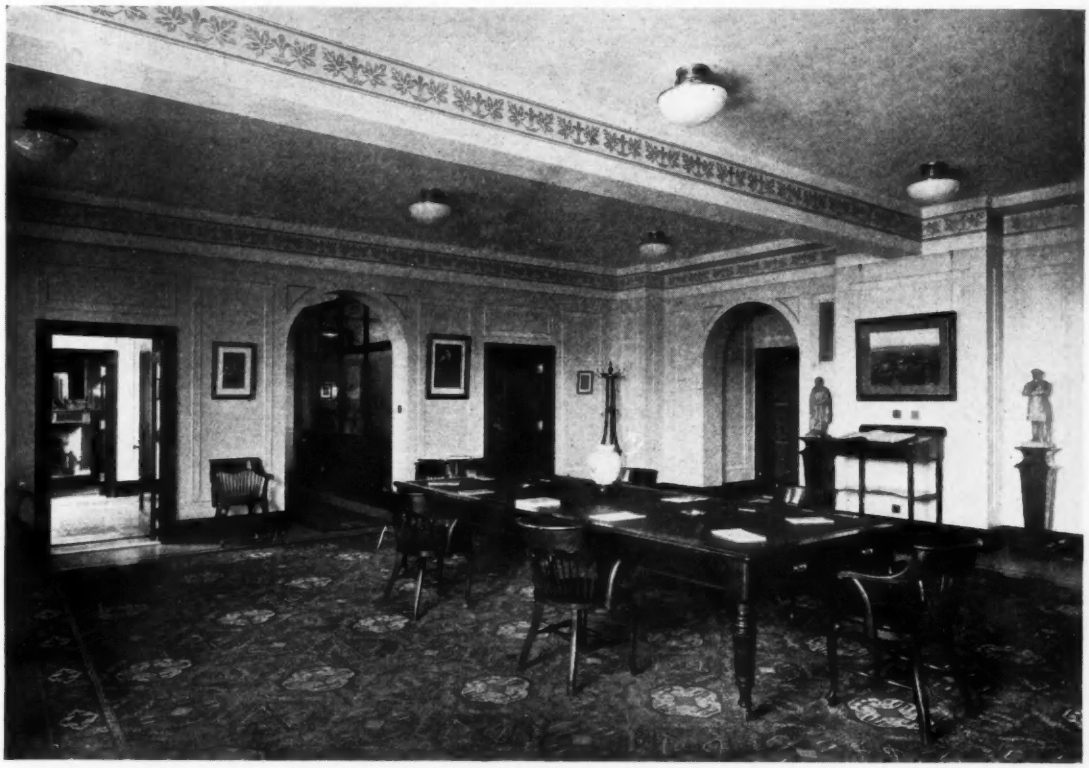
The building was designed by Mr. Septimus Warwick, F.R.I.B.A., of London, in collaboration with Mr. A. J. C. Paine, B.ARCH., A.M.E.I.C., the staff architect to the company in Montreal.

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Sun Life Assurance Building, London.] [*By Septimus Warwick.*

Plan of the fourth floor, and key-plan (on a smaller scale) of the ground floor. Many unusual problems were encountered in planning the building. There is not a right-angle anywhere on the site, yet the impression given, both inside and outside, is that of a regular and rectangular structure.



On the fourth floor is the reception room of the Quebec Government, who occupy a portion of the building. The walls of this room are light green, with gold decoration and bronze lamps.



Sun Life Assurance Building, London.] [*By Septimus Warwick.*

Light orange walls with gold decoration form the colour scheme for the office of the Agent-General of the Quebec Government on the fourth floor. The fireplace is of black and gold and white marble.

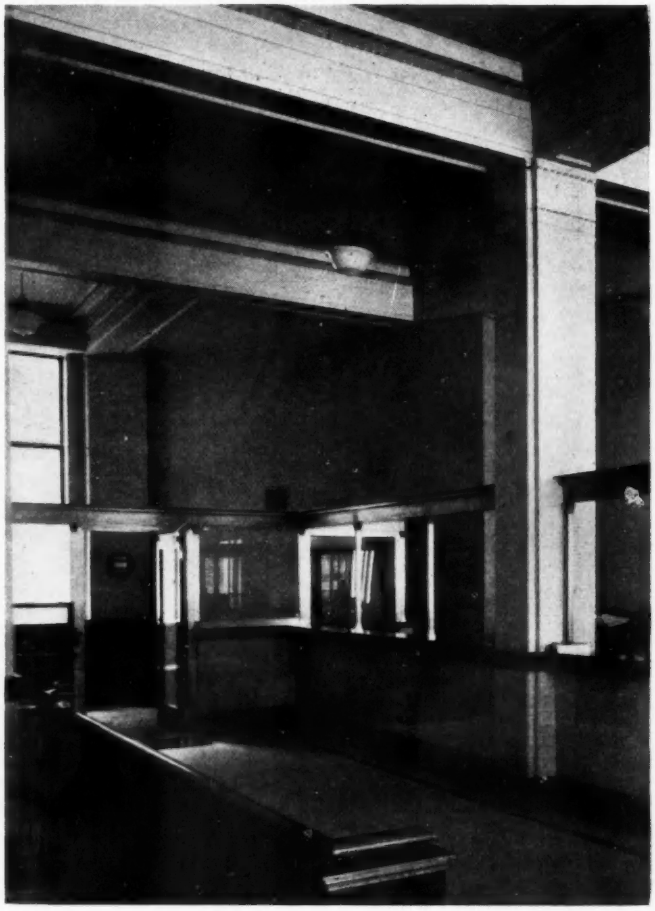


The ground-floor entrance hall is finished in rose Travernelle marble. Hollow metal doors and frames are used throughout the building, and are believed to be the first of this type to be fitted in this country.



Sun Life Assurance Building, London.]

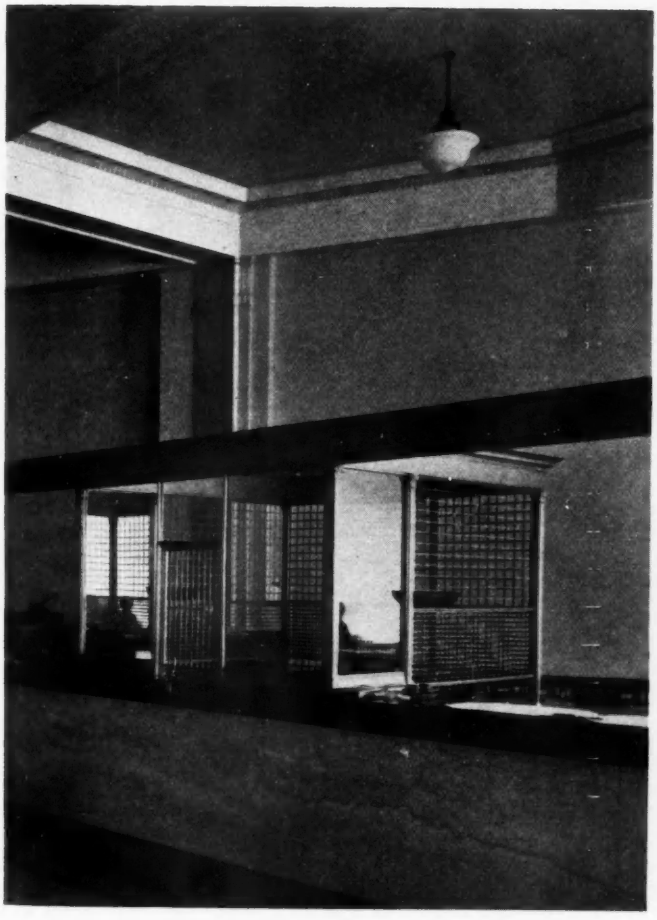
Servery of the main dining room in the basement. In designing the building everything possible has been done to ensure the comfort and well-being of the occupants. The cafeteria, plans of which appear on page 676, is one of the most modern in this country.



The Banking Chamber of the Royal Bank of Canada, who occupy gold marble. Bronze doors, screens, cashiers' cages, etc., are tile, steel and concrete, finished in marble or linoleum, and partitions are used they are of the same construction as the doors,



First-floor hall, showing passenger lift doors with indicators over. The lifts have a speed of 450 ft. per minute, and micro-levelling devices bring the cars automatically to floor levels. Lift doors are in Canadian bronze

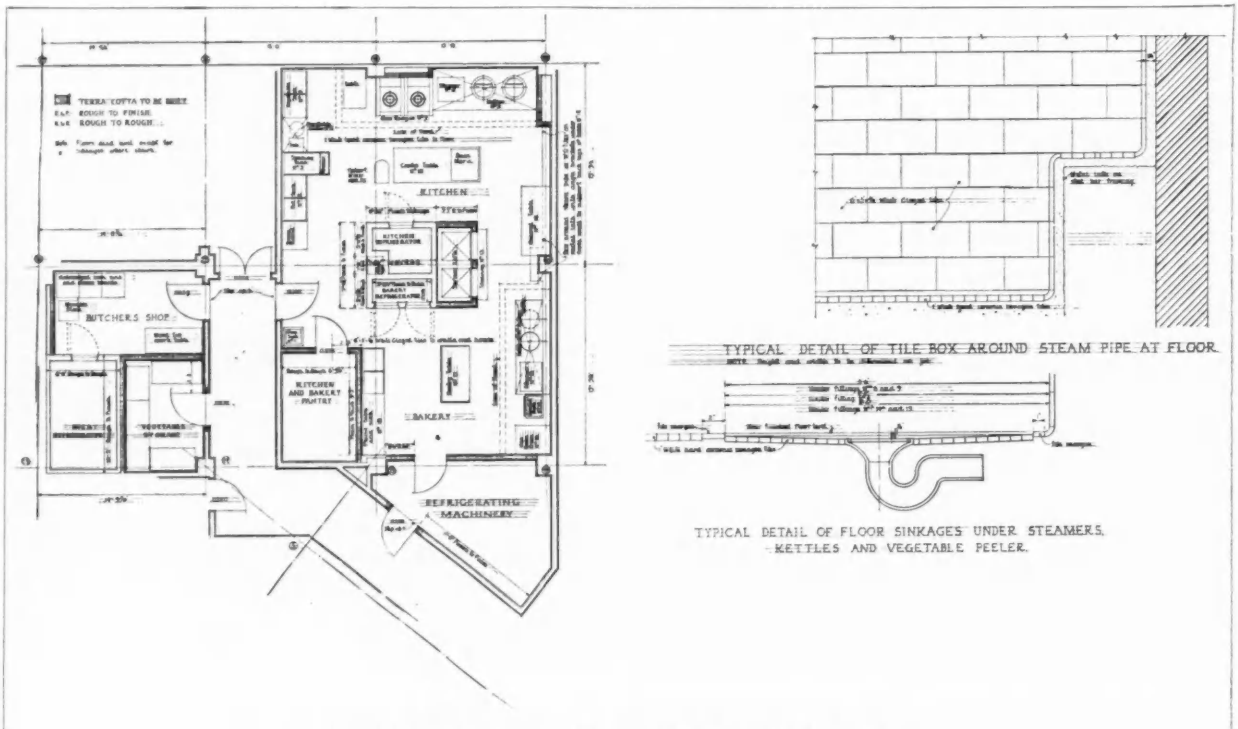


part of the ground floor. It is finished in Botticino and black and installed. No wood has been used in the building: the floors are of are of terra-cotta blocks and brick; where metal partitions and can be taken down and re-erected wherever desired.

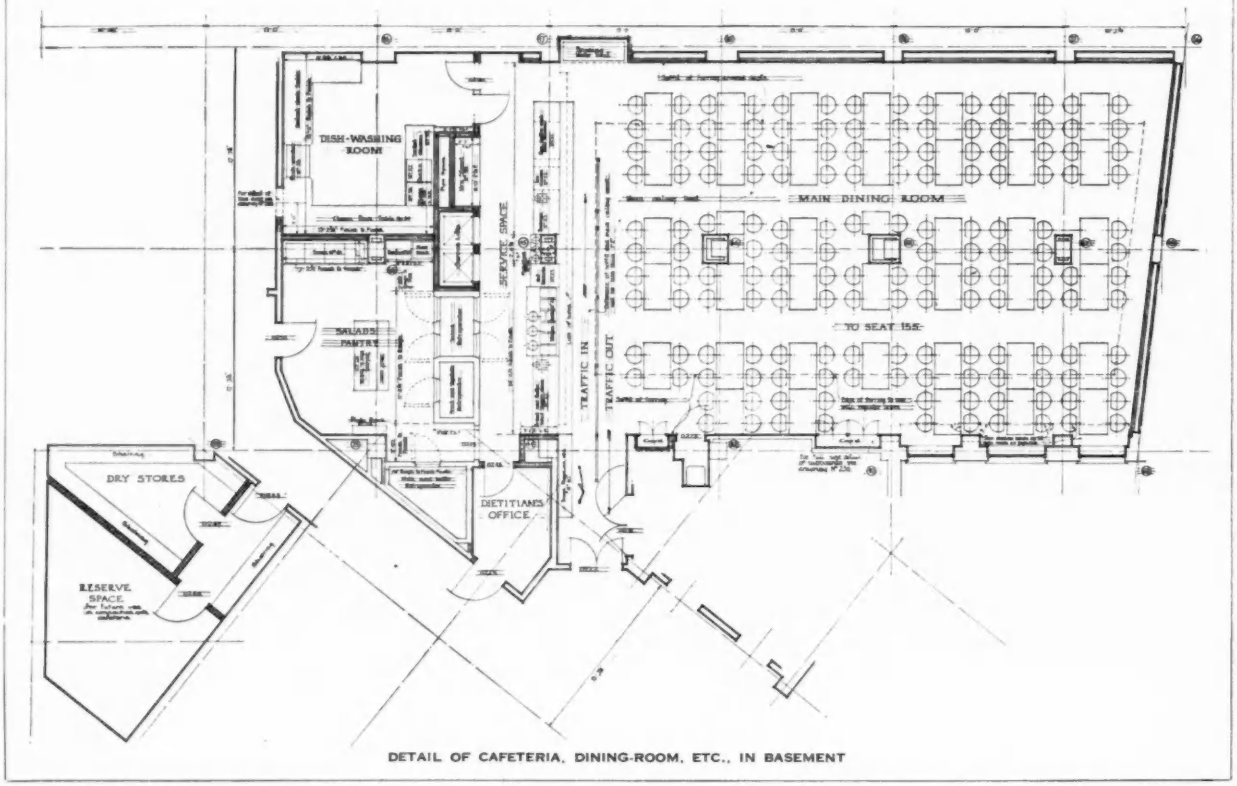


[*By Septimus Warwick.*

On the first floor is the office of the supervisor of agencies of the Sun Life Company. Throughout the building the picture and dado rails and window frames are of metal. Where there is the slightest possibility of fire, doors and windows have fire-resisting glass.



DETAILS OF MAIN KITCHEN, STORAGE ROOMS, ETC., IN SUB-BASEMENT

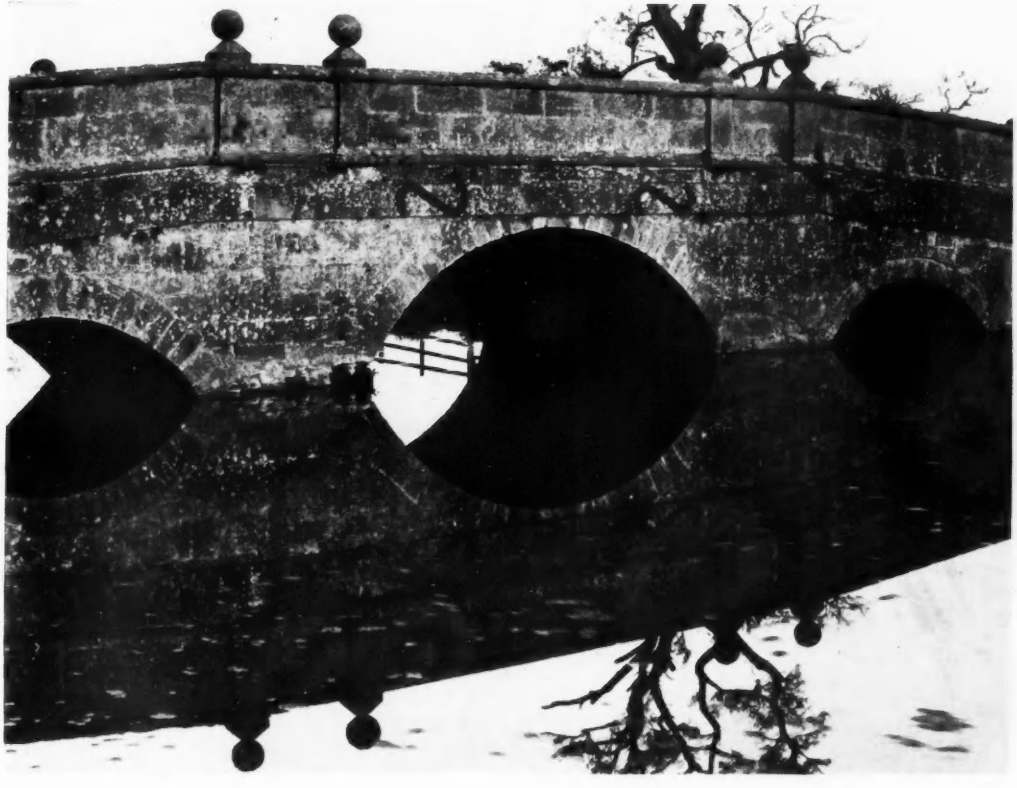


DETAIL OF CAFETERIA, DINING-ROOM, ETC., IN BASEMENT

Sun Life Assurance Building, London.] [*By Septimus Warwick.*

In the basement are the main dining-room, with seating accommodation for 155 persons, dietitian's office, salad pantry and dish-washing room. Lifts from the service space communicate with the kitchen and bakery in the sub-basement. A photograph of the service space in the dining-room, looking towards the drinking water unit, appears on page 674.





ENGLISH PRECEDENT No. 89

HONINGTON BRIDGE, WARWICKSHIRE

The River Stour is here crossed by a low five-arched stone bridge of late Renaissance date, with low parapets, extended on the end nearest the village. Slightly projecting pilasters in detached pairs have the mouldings of the external face of the bridge carried round them, and are capped by stone balls. The whole effect is very pleasing.

—[C. M. C. ARMSTRONG.]

THE HONEYWOOD FILE

BY KARSHISH

No. XXVI: Sir Leslie Brash Moves In

The Christmas holiday is past and the men are working all over the house in a scattered and desultory way, to the probable exasperation of Brash, who, in his proprietary rambles, comes upon them in the most unexpected places. His architect, Spinlove, has said he will be able to move in at the end of the month. That architect has, perhaps, added an elastic week to the date given him by the builder, but already begins to doubt whether he added enough, for two matters threaten postponement of the great day: the District Surveyor has refused certificate of occupation on the ground that one of the bedrooms is insufficiently lighted, and the special paint Brash ordered, against his architect's advice and the builder's judgment, has shown signs of going wrong.

POTCH (DISTRICT SURVEYOR) TO SPINLOVE

Sir, 29/12/25

I have received your letter stating I agree your measurements of floor and window at Honeywood, but can find no record of agreement in this office and shall be glad of reference and date, as my assistant says nothing on files.

I am, sir, yours faithfully,

This is a mere quibble, intended to obstruct and annoy.

SPINLOVE TO POTCH

Sir, 31/12/25

I understood you accepted the figures I gave—namely, 15 ft. super for the window and 129 ft. for the floor of bedroom. I must ask you either to forward certificate without delay or appoint someone to agree dimensions on the spot. Yours faithfully,

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 31/12/25

The holiday has prevented my replying sooner to your letter.

It is well understood by Mr. Grigblay and myself that the Riddoppo paint is being used by your orders and under your responsibility, and it would suit Mr. Grigblay to finish the painting and have done with it. He pointed out to me what he thinks to be a serious defect, and I considered it my duty to report his views, which are quite disinterested, to you. I agree that, superficially, the finished painting looks well: the work has been carefully and skilfully done. It requires a practised eye to notice the defect, but apparently a creeping action has begun. If you look at the bottoms of doors and along tops of skirtings below painted walls you will see rims of paint; and a drag or ripple in the surface can also be discerned in places. Mr. Grigblay thinks the defect will increase. The painting is being proceeded with, as you wish.

With best wishes to Lady Brash and yourself for the New Year,

Yours sincerely,

This is an adequate and wary letter. Spinlove does well to make no recommendation. To do so would associate him with future difficulties and, in fact, no one except the manufacturers of the paint can advise Brash.

POTCH TO SPINLOVE

Sir, 31/12/25

I do not know what sort of foot rule you use, but I go by English Standard (Pinchlocks' Double Folding Pocket 4/3); and suggest you get a new tape as yours is stretched.

My Inspector notes glass—three times 3 ft. 5 ins. × 1 ft. 3 ins. = 12 ft. 10 ins.; floor, 10 ft. 11 ins. × 12 ft. 2 ins. = 132 ft.

I am, sir, yours faithfully,

The measure 12 ft. 10 ins., by the system employed in building operations, represents 12 superficial feet and $\frac{10}{12}$, or $12\frac{5}{6}$ feet super.

SPINLOVE TO GRIGBLAY

Dear Sir, 1/1/26

I enclose copies of letter to the District Surveyor and his reply. My measures are taken from the half-inch joinery detail, and from brick dimensions of room, allowing 2 ins. on each wall for plaster and skirting. Will you ask your foreman to check my figures against Mr. Potch's, and let me know where the discrepancy is? *Urgent.*

Yours faithfully,

BRASH TO SPINLOVE

Dear Mr. Spinlove, 2/1/26

I must request to be permitted to reiterate over again that I am not equipped to adjudicate in a technical matter appertaining to craftsmanship, and which I apprehend belongs to the province of my professional adviser—by which term I designate yourself—to see that the painters perform their functions in an efficient manner.

I again inspected the mansion yesterday, and Mr. Bloggs indicated what he deemed irregularities, but which are, I apprehend, of quite immaterial significance.

With reciprocations of your seasonable good wishes from Lady Brash and myself, Yours sincerely,

Most lordly and most melancholy! Brash's self-sufficiency will not allow him to "apprehend" the facts.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 4/1/26

My services are, of course, entirely at your disposal, but I am unable to tell Mr. Grigblay how to deal with the defective paint as I know nothing of Riddoppo, which, as you are aware, is a "new novelty super-paint compounded of new secret ingredients." You will recall that I advised against its use and that neither Mr. Grigblay nor myself were able to accept responsibility for it. The blemish is, so far, inconspicuous, but may be a symptom of inherent defects.

Yours sincerely,

Spinlove here is "reiterating over again" the very thing Brash has asked him to "desist from intimating," but his tenacity here is very much to the point. When Riddoppo begins to "crawl out of the front door and off home"—as Grigblay expects it one day will—this letter will safeguard Spinlove from being involved in the catastrophe. The very long head James wears through these interchanges he owes, no doubt, to Grigblay having "put him wise," as they say in America.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 7/1/26

I have received your further communication anent Riddoppo. I can only once again asseverate that the blemishes indicated by Mr. Bloggs are of insignificant importance, and that the painting satisfies the anticipations of the person most vitally concerned, who is paying for it, and who I apprehend to be not precisely Mr. Grigblay nor my architect, but, to be brief, myself alone.

The lettering on the doors is esteemed by us as a distinct advance in the improvement of the house, and you will be gratified when I intimate to you that we agree that the parti-coloured variegations of tints originally proposed would not have provided the refined appearance now obtaining. Will you be so obliging as to have the door of the chamber apartment now lettered "Salmon" altered to "Strawberry," as the connected association is unpleasantly distasteful to Lady Brash.

We are proposing to arrange to move in our furniture on the 22nd inst. prox.

Believe me, yours sincerely,

Brash is evidently pleased with the house. We may detect in his letter a note of bland, proprietary self-congratulation.

SPINLOVE TO GRIGBLAY

Dear Mr. Grigblay, 8/1/26

Sir Leslie Brash wishes the painting with Riddoppo completed as he does not consider the defects of any importance. He proposes to move in furniture on the 22nd; will that be possible? I enclose a list of matters which need attention.

Will you please have the door now lettered "Salmon" altered to "Raspberry"?

Yours faithfully,

Spinlove has made a slip here.

GRIGBLAY TO SPINLOVE

Dear Sir, 8/1/26

Our foreman has checked measurements, and says Mr. Potch is right for glass area. Your figures are correct clear of window-frames. The iron casements stand in $\frac{9}{16}$ in. full. Mr.

Potch's dimensions are also right for area of room, but he has measured above skirtings. Our foreman suggests why not fill in recess with cupboard fixture, so as to reduce floor area.

Yours faithfully,

It is to be noted that in most right designs—if not entirely in all—the size of casements is a unit of the elevations which cannot be varied, and that the minimum of one-tenth of floor area for windows gives an excessive amount of light to some rooms with some aspects—if æsthetic judgment rather than hygienic theory is to guide. The consequences are that to obtain a good disposition of windows in the elevation and an adequate, but not excessive, window area to rooms, is a matter which particularly exercises the ingenuity of the designer. The bedroom in question was properly lighted by a range of three casements, but the moving of the partition has increased the floor area up to, or over, the maximum size allowed by the bylaws in respect of these three casements. If a fourth casement is added, it will be likely to play old Harry with the elevation and to overlight the room; and as the only way of arranging four casements will probably be to take the window out, re-make it with new head and cills, and re-centre it in the elevation, the breaking down and making good of brickwork is likely to show up on the elevation for some time. Though everyone else may soon forget the ungainly room and never notice the botched elevation, Spinlove will remember his regrets to the end of his life. Potch does not know this, and would not understand if it were explained to him; annoyance, humiliation, and cost to his rival and the man who employs him, are his aim.

SPINLOVE TO POTCH

Dear Sir, 9/1/26

I find that your measures of windows are taken to the glass line, and of floors to walls above skirtings.

My measures are taken to the line of the frames as this, in my experience, is customary; and I claim that the floor area is properly measured up to skirtings and not above them.

Even if you insist on the window area being estimated as the area of actual glass, the floor area, measured to skirtings, is still only two-thirds of one square foot more than ten times that of windows and, I submit, so small a discrepancy, depending on an unusually exacting computation of window area, does not justify the withholding of the certificate. The addition of another casement is an extremely awkward matter and will ruin the elevation, and is surely a scarcely reasonable demand?

The owner wishes to move in on the 22nd, so time is short. I hope, therefore, that with these explanations before you, you will feel able to draw the certificate. Yours faithfully,

This is a quite foolish letter. Spinlove seems to be so distressed at the prospect of having to mutilate his elevation and spoil the room, that he is reduced to begging for mercy, which, as he must know, is perfectly useless. A man like Potch reacts only to impulses of greed or funk, and as Spinlove is incapable of bribery, he must fight. Spinlove's measure of window area is 15 ft.; Potch's, $12\frac{5}{6}$ ft. The difference represents only $\frac{1}{2}$ in. off each face of frames, but involves a floor area of $21\frac{3}{8}$ ft.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 11/1/26

I was speaking to Mr. Grigblay on the telephone today, and I fear it will not be possible for you to move in on the 22nd, nor, indeed, this month. As you know, there are a good many odds and ends remaining to be done, and the painting of various cupboard fittings Lady Brash has ordered has yet to be finished, and I do not think you ought to fix a date much before the 12th February. I am also sorry to say that the Local Authority has refused certificate of occupation on the grounds that the window in bedroom No. 5 is not big enough, but I am hoping to get this matter settled quite shortly.

Yours faithfully,

POTCH TO SPINLOVE

Sir, 12/1/26

You should not have made the window too small if you did not care for the trouble of altering it larger. My Council cannot change its bylaws to suit A.R.I.B.A.s, and if time is short you would be better correcting your mistakes than wasting more of it writing letters instead.

I am obliged to you for pointing out what my duties are, but it would be better if you spent your time some other way, as it happens I have had more chance of learning it than what young London office architects have.

I am, sir, yours faithfully,

Spinlove's letter produces an insult from the Potch mechanism as surely as his penny would a bit of chocolate out of an automatic machine.

The Model Bylaws *which Local Authorities are at liberty to select from and "adopt" at will, speak of "floor area" and "area of windows clear of frames." Spinlove has either been misled by a bluff on the part of Potch and overlooked this last definition, or the words "clear of frames" may possibly have been omitted from the Marlford District Council's version. In the latter event Spinlove would get his measurements upheld by appeal to the Local Government Board.*

SPINLOVE TO GRIGBLAY

Dear Sir, 15/1/26

I cannot reduce floor area by putting cupboard fixture in recess, as this is wanted to take Lady Brash's wardrobe.

I enclose detail of a small casement window. This, as you will see, is to go over the lavatory basin, and will come very nearly central between the ranges of adjoining casements. I am sorry to have to order the work, but the Surveyor insists. Yours faithfully,

BRASH TO SPINLOVE

Dear Mr. Spinlove, 14/1/26

I really must asseverate my protestation at the successive procrastinations anent completion. Permit me to remind you that the builders contracted for eventual occupation on or before December 11 last year; I was then informed I might arrange to take up residence shortly after Christmas, and subsequently the 22nd was the extended date fixed. I am now informed that the middle of next February prox. is the anticipated day, and am given to apprehend that this date may eventually be eliminated and so on infinitum [*sic*], which is, as you will agree—if you will permit me to express myself so—a most preposterous succession of prevarications and procrastinations.

In addition to these delays and postponements, for which I apprehend the contractor is responsible, you now inform me that the necessary certificate entitling me to occupy the house is not forthcoming because, forsooth, you have made one of the windows too small! Are we ever going to get into the house at all?—that I apprehend to be a question to which it is now incumbent on me to request a definite assurance. Why is the window not large enough? I apprehend that to be a matter on which I was entitled to rely upon your judicial discretion. Yours sincerely,

Our sympathies may well be with Brash's impatience, though not with his grievance, which is unreasonable. He and Lady Brash have, in fact, been accountable for greater delays than they complain of; but for one reason or another there always are delays, and Grigblay, all circumstances considered, has done well not to be more behindhand than he is.

CONFIDENTIAL—GRIGBLAY TO SPINLOVE

Sir, 17/1/26

I noticed your correspondence with Mr. Potch in the office and have seen your detail of little port-hole makeweight. I fancy it goes against the grain, for I know something of the way architects feel, so I take the liberty to let you know that Mr. Potch is not so particular with his own building, nor yet with that of some others, and I can drop him a hint that will make that certificate come by special messenger. If you do not care for that—and I would rather not start any mix up with Mr. Potch—why not brad a bit of ovolo down on the floor against the skirting, just to make it easy for the poor housemaid to sweep the dust out of the corners and not tire her pretty self? Half-in. wide would bring the floor area down to limit and leave a bit over for good manners. No trouble to take up again before the family moves in.

With apologies for troubling you, but thought you might like to do it,

Yours faithfully,

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 19/1/26

The 22nd was named by *you*. I said " before the end of the month " ; and were it not for the many fittings which have been ordered only after the house is on the point of completion, there would be no reason why you should not move in this month.

You must permit me to excuse myself. The window of bedroom No. 5 was big enough for the room as I planned it, but the room was made too big for the window when, by your orders, the partition was moved. The grounds for the Council's objection are trivial, and since I last wrote I have succeeded, I think, in arranging matters, and there will be no delay on this account.

Yours sincerely,

Spinlove has certainly advanced in discretion and force ; his early diffidence and shyness, and consequent indecision and impulse to be plausible and to explain and justify himself, have in great part disappeared. The reason is, no doubt, that he well knows the persons he has to deal with and feels himself master of the position now that his knowledge of past history, rather than his judgment in making new, is involved.

SPINLOVE TO GRIGBLAY

Dear Mr. Grigblay, 18/1/26

I am much obliged for your letter. Will you please have the skirting fillet fixed as you suggest and return my detail No. 49. Yours very truly,

SPINLOVE TO POTCH

Sir, 22/1/26

I write to notify you that lighting of bedroom No. 5 at Honeywood has now been amended to comply with the bylaws, and to apply for certificate of occupation. Yours faithfully,

CONFIDENTIAL—GRIGBLAY TO SPINLOVE

Sir, 28/1/26

I went down to Honeywood today to have a look round and you may tell Sir Leslie Brash the house will be ready for him on February 10 unless he orders other work to keep himself out of it. The road, etc., will take a couple of weeks to finish and had better stand till the old gentleman has got his furniture in. I've seen something of the mess these heavy lorries can make of a new road, and this one is none too heavily bottomed. Bloggs will be clearing up next week.

While I was down there Mr. Potch paid us a friendly visit. He ran to room No. 5 as if he had buried a bone there, and I followed and found him huffing and blowing his nose, but I soon stopped his nonsense and we shall get the certificate in a day or two.

Riddoppo super is beginning to act up and I shall be glad to be out. Potch went away with a bit of it on his behind end, but I don't know where he got it, for the surface is dry and firm though it does not look to be so underneath, for in places it is beginning to ride up over itself, and it is hanging from the bottoms of doors again for all it was cut away once, and a bead of it laying along top of skirtings. There is one place where furnace flue goes up kitchen wall, where it is beginning to crack like a really fine old picture. In my opinion it will all have to come off again, unless it's kept on to prevent the house catching fire, but it can't be burnt off because it's fireproof, and it can't be pickled off because it's acid proof, so there you are ! It is a pity the makers who had such a lot to say about laying it on didn't spare a word or two about getting it off.

Apologizing for troubling you but thought best to tell you.

Yours truly,

GRIGBLAY TO SPINLOVE

Dear Sir, 31/1/26

We have received certificate of occupation from the District Council's Surveyor.

We note that your client wishes to move in on the 8th, instead of the 10th as arranged, and we think there will be no objection to this.

We enclose rough approximate statement of account and shall be glad of your final certificate. The detailed statement will follow in due course.

Yours faithfully,

Grigblay is entitled to certificate for the whole value of the work, less 5 per cent., on completion.

BRASH TO SPINLOVE

Honeywood Grange.
Tel. : Fornot 178. **Nr. Marlford,**
P.O. : Thaddington. **Kent.**
Ry. : Wedgfield 4 M. (Taxi 5/-).

My dear Mr. Spinlove, 13/2/26

Here we are eventually ! We commenced to take up residence at Honeywood Grange on Thursday and occupied the sleeping apartments last night for the first occasion. Although there still remain a vast number of dispositions of furniture to adjust, I desire on behalf of Lady Brash and myself to intimate that we are completely charmed and delighted with the mansion. We consider it to be most elegant in every respect and anticipate that we shall esteem the convenience and appropriateness of the various different arrangements still more as time progresses; and we already have had occasion to appreciate the recommendations you have suggested and your forethought in providing beforehand many excellent devices. We shall anticipate seeing you here when we have settled down.

Believe me, with best regards from Lady Brash and myself,

Yours very sincerely,

So that's that ; and a handsome letter for even a grateful client to write.

SPINLOVE TO BRASH

Dear Sir Leslie, 14/2/26

Very many thanks to you and to Lady Brash for your most kind letter, which, I can assure you, gave me great pleasure. I shall look forward to seeing the house when you have settled down. One cannot really see a house properly until it has been furnished.

I am sure that Mr. Grigblay would very much appreciate a line from you telling him you are pleased with his work. He has taken great pains to make it a success.

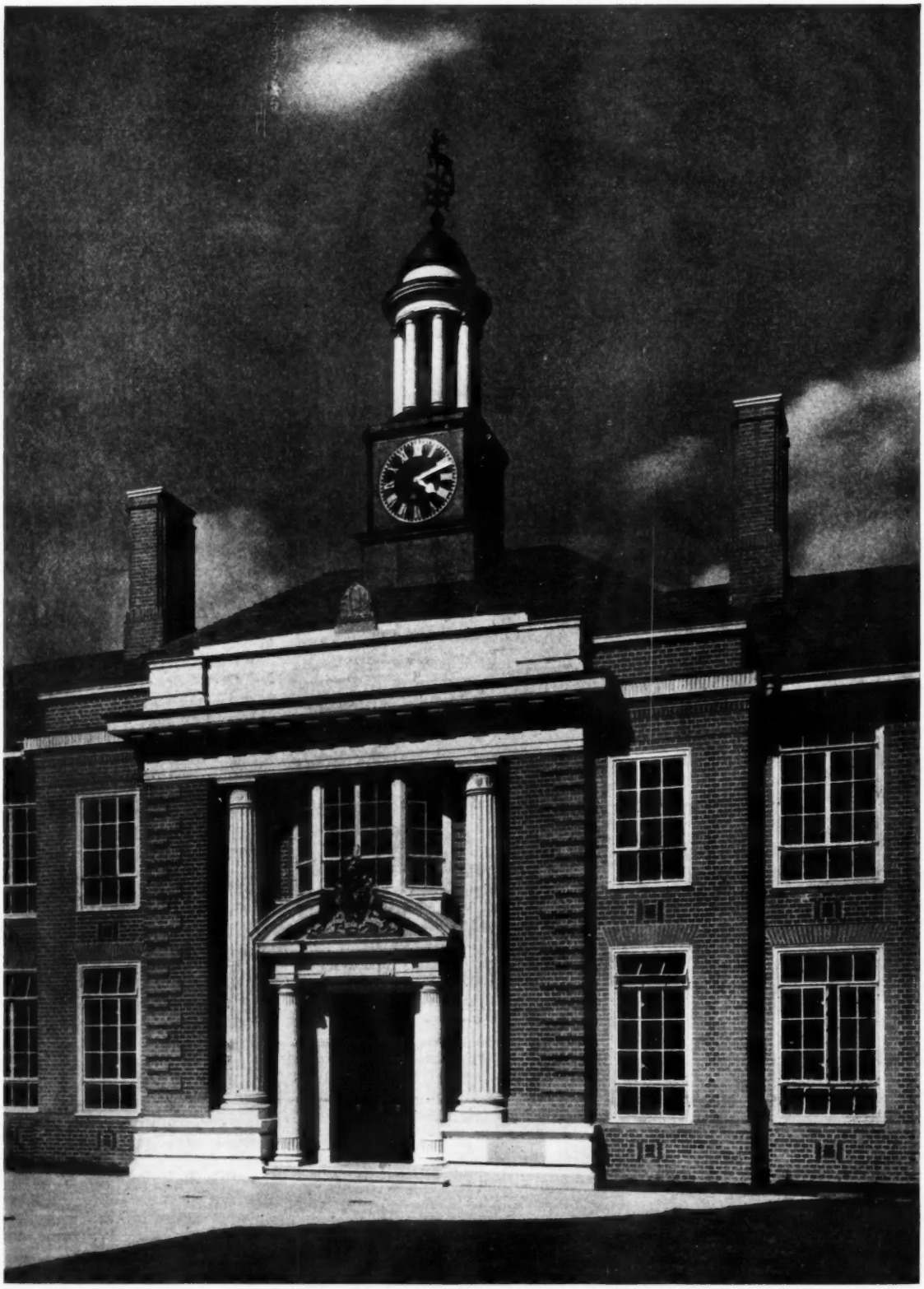
With kind regards and good wishes to Lady Brash and yourself,

Yours sincerely,

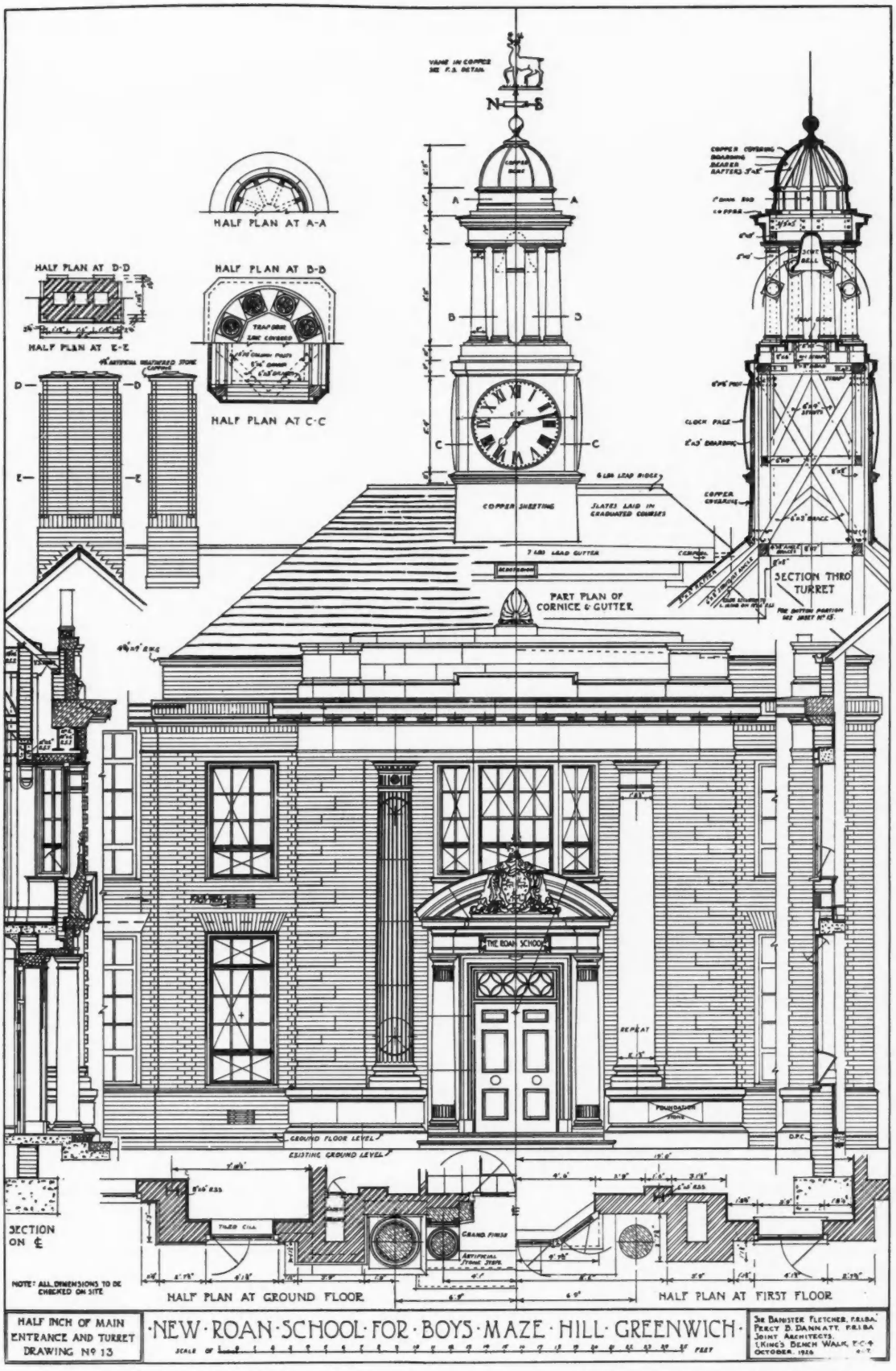
* * * *

And so the file ends; but it ends at the point where the folder will hold no more papers: the last score of letters have, in fact, been packed under the clip to bring the chapter to a close, for a chapter, only, it is. There must be somewhere in Spinlove's office another chapter enshrined in another folder. That second chapter may be a short and uneventful chapter; or it may be neither short nor uneventful nor even the last. The Honeywood account has to be settled, and the numerous items of that account may raise many questions of fact and lead to a review of events gone almost out of memory. Questions of extras may arise in which the architect, although involved by his own acts of omission or commission, has to keep the scales balanced between builder and client and gild for the latter, as best he may, the often bitter pill called " Final balance due." Last, this second chapter will contain the history, be it long or short, of the inevitable small defects and the possible big ones which reveal themselves after a house has been occupied and which, should they appear within nine months—or more or less—and so far as they are due to improper workmanship or materials, the builder is engaged under the terms of his contract to make good. Yet a third chapter, clipped perhaps within another folder, may lie upon Spinlove's shelves; but we, who have come to know him, may hope that it does not exist. It could only be a record of pains and miseries—a chapter of bitter memories; for while the builder's liabilities end when he has redeemed those of his faults which reveal themselves within the limit of nine, or other, months fixed by the contract; the architect's liabilities are for all defects due to his negligence, whether faults of himself, of manufacturers, of specialists, or of builders, which may appear within the limit of six years fixed by the law. We know, however, nothing of what other files may lie in Spinlove's office. The last page of THE HONEYWOOD FILE is the front cover, and that we now close.

ENTRANCE FRONT OF THE NEW ROAN SCHOOL



On this and the facing page is illustrated the entrance front of the New Roan School for Boys at Greenwich. It has been designed by Sir Banister Fletcher, the new President of the R.I.B.A., and Percy B. Dannatt, joint architects. Notes by Astragal on Sir Banister Fletcher's presidential address, delivered at the Royal Institute on Monday last, appear on page 666.



A reduced reproduction of the architects' detail of the main entrance and turret of the New Roan School for Boys, Greenwich.



The main front of the Palais de Danse, Leicester, faces Humberstone Gate. Externally, the walls are finished with stucco, colour-washed cream. The copings are of stone. The architects' working drawings of the main front are reproduced on page 687.



This central feature of the St. James Street front is to the right of the end portion of the building shown on the facing page.

PALAIS DE DANSE, LEICESTER

DESIGNED BY STRETTON AND NOTT

THE Palais de Danse, Leicester, occupies an important site at the corner of Humberstone Gate and St. James Street. The main front in Humberstone Gate has been given a symmetrical architectural treatment, the central feature being formed by the entrance, its marquise, and the three semicircular-headed windows on the upper story, which light the balcony lounge.

The main entrance leads into a marble vestibule, where are situated the pay-boxes and the swing doors leading to the promenade. The promenade extends the full length of the main front and of the dance-hall. The spring dance floor is about 96 ft. long and 51 ft. wide.

Among the interesting features of the hall are five large circular panels in the ceiling (see facing page). Three of these panels connect with fan chambers and the remainder are ceiling lights. The whole of these panels are fitted with ornamental grilles of wrought iron. At the rear of the dance-hall are a spacious tea space, service, etc. The office shown on the plan at the corner of Humberstone Gate and St. James Street is now the manager's room, and the room marked "Manager" is used by the band. Two emergency exits from

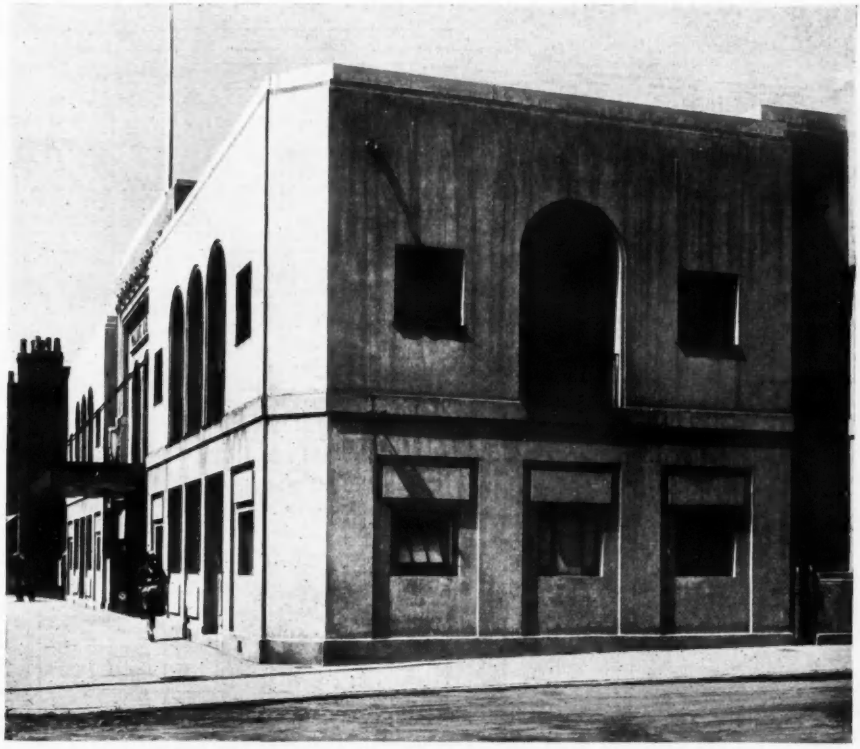
the dance-hall lead into St. James Street.

During building operations an additional floor was added at the rear of the ground floor, over that portion marked " tea space and service " on the plan reproduced on page 686. This additional story contains a café lounge, with a balcony overlooking the dance-hall and private supper-rooms, with service and staircases at each end.

Other accommodation on the first floor includes a balcony, lounge and ladies' and gentlemen's cloak-rooms, approached from the ground floor by two staircases, one on either side of the entrance vestibule.

The building is heated by means of gas-steam radiators and ventilated by three exhaust fans in the roof space. The cost of the building was approximately £20,000.

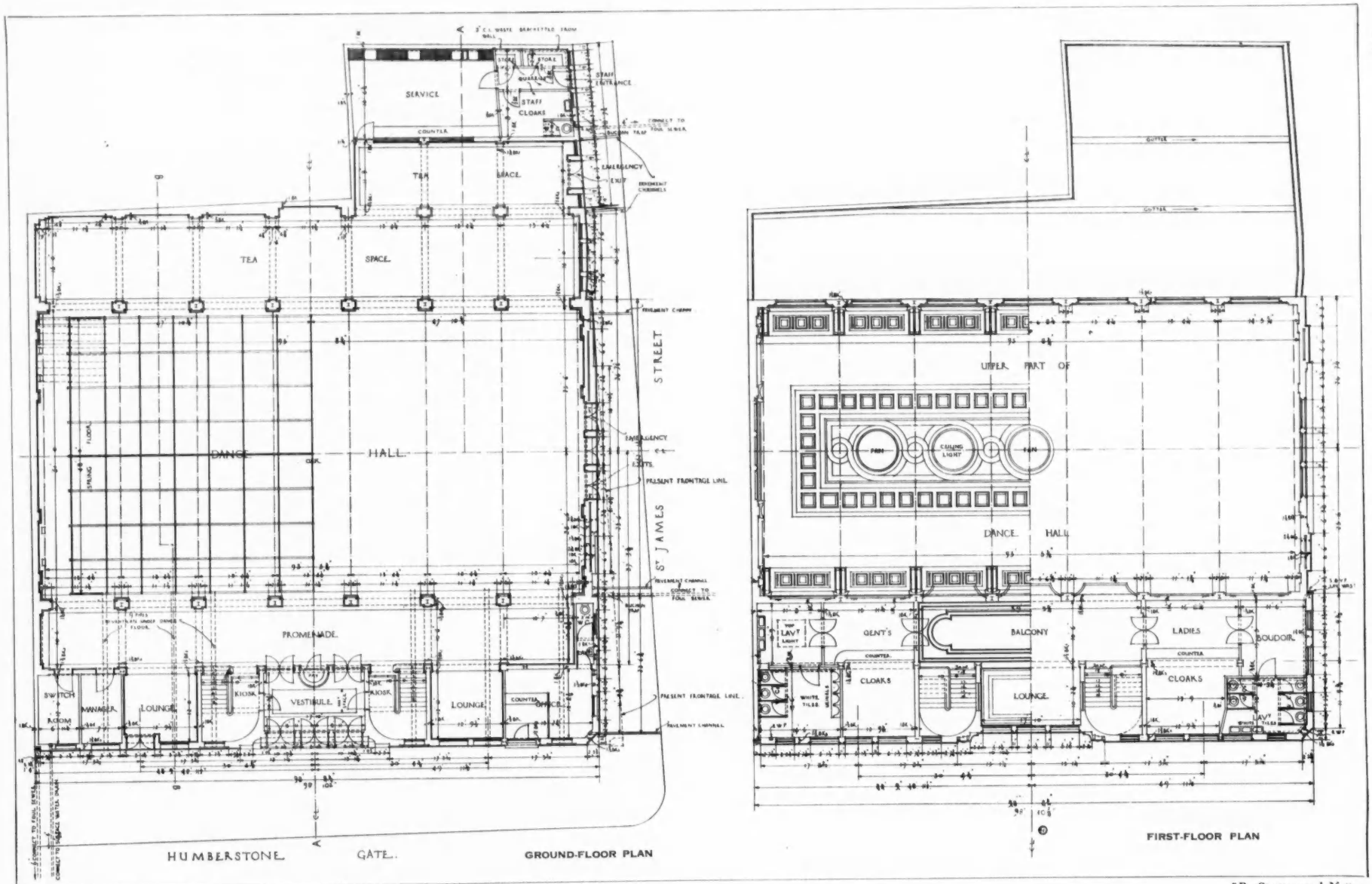
The exterior walls are finished in stucco, colour-washed cream. The coping and vases are in stone ; and the exterior grilles and balconies in cast iron.



A photographic detail of the end portion of the St. James Street front at its junction with Humberstone Gate.



In the dance hall the spring floor is about 96 ft. long and 51 ft. wide. Three of the five large circular panels in the ceiling connect with fan chambers and the remainder are ceiling lights. All the panels are fitted with ornamental grilles of wrought iron.



Palais de Danse, Leicester.] *[By Stretton and Nott.*

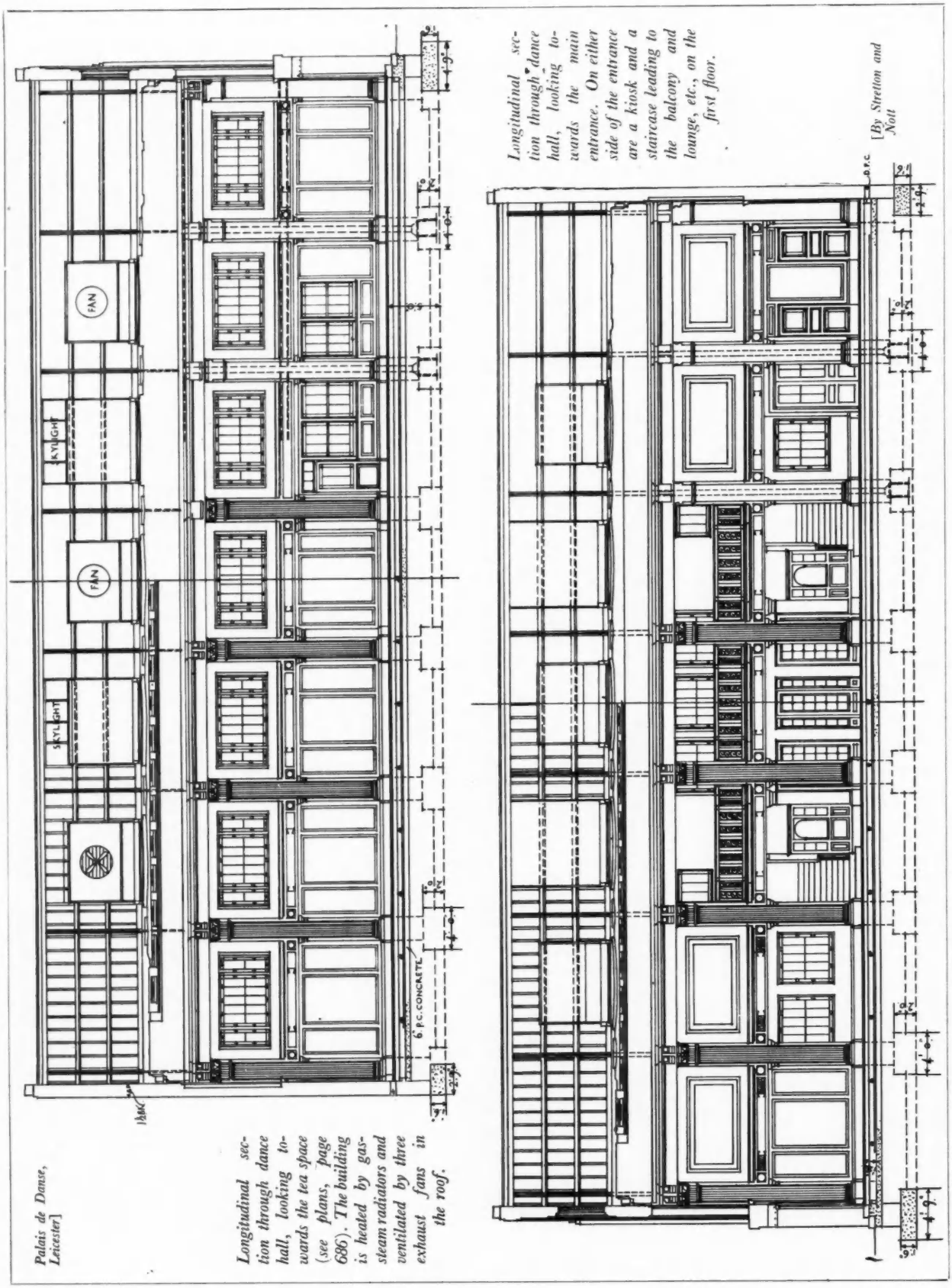
Ground-floor and first-floor plans. During the erection of the building an additional story was added to that portion of the plans marked "tea space and service." In this additional story are a café lounge, with a balcony overlooking the dance hall, and private supper rooms, with service and staircases at each end. The office at the corner of Humberstone Gate and St. James Street is now the manager's room: the room marked "Manager" is used by the band.

story are a café lounge, with a balcony overlooking the dance hall, and private supper rooms, with service and staircases at each end. The office at the corner of Humberstone Gate and St. James Street is now the manager's room : the room marked "Manager" is used by the band.



A photograph of the main entrance, and the architects' working drawings of the principal elevation. The exterior grilles and balconies are in cast iron, the vases are in Portland stone, and the lettering is in raised non-corrosive metal. Marble has been used for lining the walls, and for the floor, of the vestibule.

Palais de Danse, Leicester.] [*By Stretton & Nott.*



Longitudinal section through dance hall, looking towards the tea space (see plans, page 686). The building is heated by gas-steam radiators and ventilated by three exhaust fans in the roof.

Longitudinal section through dance hall, looking towards the main entrance. On either side of the entrance are a kiosk and a staircase leading to the balcony and lounge, etc., on the first floor.

Palais de Danse, Leicester

[By Stretton and Nott

LITERATURE

TAKING OFF QUANTITIES

Every surveyor has had the experience, some time in his career, of facing, for the first time, a set of drawings for the purpose of taking off dimensions of a proposed building. This eventful moment constitutes the crowning reward of much perseverance both at technical classes and at the office, in which the soundness of the general routine has meant so much to the aspirant for the highest honours of his profession. He has also, in all probability, made an exhaustive digest of the contents of all text-books which have been written to guide him towards the desired goal.

It is, therefore, somewhat of a shock to the average freshman to find his real learning is only about to commence when the drawings of an actual proposed building have to be negotiated and not merely work on some typical example. He quickly finds that with all his knowledge and confidence, something further is needed to smooth away the difficulties. It must be for this specific purpose that Mr. Willis has followed his excellent book on "Working up" with further notes for the "Taker off." The author writes on the assumption that the reader has mastered the more ordinary groundwork and proceeds to deal with various problems which are met with more in everyday practice than during times of study.

Amongst the subjects of the various chapters are useful hints on dealing with sub-contractors' work, the attendances upon which often tend to fall heavily upon the client's shoulders.

In a chapter "Notes on Each Trade" he skilfully compares the good with the bad in what is known as "The Standard System of Measurement." Is there a surveyor who is not ready to emphasise his ideas of the good and the bad in efforts of this nature? The author instances some of the contradictions which exist in this production and renders good advice to those who wish to adhere to the principle contained therein, and equally good advice to those who quite reasonably may not desire to follow the methods laid down.

Variation accounts, which often provide very interesting work for the surveyor and bring him into contact with all manner of deviations on a contract, have a chapter containing amongst other useful reminders, one on the matter of gathering various items together, a process which is very often either left to the working up section or done in such fashion as to be quite unintelligible to the client.

The clauses contained in the R.I.B.A. Conditions of Contract such as closely affect the surveyor are explained in detail, and adjustments of errors which *are* known to creep in sometimes have not escaped the author's notice.

The book contains a great deal of interest to those engaged in the quantity surveying profession and will prove to be a handy form of reference in times of need, more especially in circumstances which may be described as "out of the ordinary."

B. O. FRICKER

Some Notes on Taking Off Quantities. By Arthur J. Willis, F.S.I. The Architectural Press. Price 3s. 6d. net.

SELL'S BUILDING TRADES LIST

The 1929-30 edition of *Sell's Building Trades List* has, like its six predecessors, been corrected up to the date of going to press. In the present issue the pages have been reset, and the registered telegraphic addresses and telephone numbers added to the names of each firm to facilitate communications. This improvement will be appreciated by all users of the book.

The editors of the list have collated the names, addresses, and grades of all persons and firms in Great Britain and Ireland who are engaged either as building contractors or in the supply and distribution of building materials, and all the large producers and makers of any kind of requisite used in the construction, equipment, and maintenance of every class of building. The names are alphabetically arranged under appropriate trade headings, which enable the purchaser to get into direct touch with the makers and merchants producing and distributing such goods, and the seller to find his market.

The list has been compiled with the object of supplying architects, builders, and users of any kind of building material or requisite with a reference book which can be brought into daily use. This object seems to be fully accomplished.

Sell's Building Trades List, 1929–1930. Business Directories, Ltd. Price 5s. net.

AN IDEAL YEAR BOOK AND DIARY

The *Year Book and Diary* of the Berks, Bucks, and Oxon Architectural Association provides a useful model which should be followed by every professional society and institution. In addition to the transactions and proceedings of the association, and the names of the officers of the council and the register of members—information similar to that to be found in the year book of every society—there is bound within the one volume a diary for 1930. Each page in the diary is devoted to three days, and handy notes are printed under the dates when members must submit plans to the various municipal authorities within the province covered by the association. The inclusion of this diary makes the publication of everyday use, and removes it from the danger of becoming simply another addition to the bookshelf.

The 1929 Year Book, and 1930 Diary of the Berks, Bucks, and Oxon Architectural Association. Price 2s. 6d.

ST. ALBANS AS IT IS

At last we have a real guide-book of St. Albans. It has been published by the Design and Industries Association, and is dedicated to the C.P.R.E. The object of the publication is to show readers what they will really see in that cathedral city, and not what they expect or would like to see. Maimings, deformities, and disasters in development are illustrated side by side with such beautiful and mellow buildings as the Cathedral, the Gate House, the Glossop Memorial, and those at Sandridge, a village close by.

Mr. Clough Williams-Ellis says in the preface that the Association have no



The Gate House, St. Albans. [*From* The Design and Industries Association Cautionary Guide to St. Albans.]



The hedgerow flowers of civilization. A new use for old bedsteads. [*From* The D.I.A. Cautionary Guide to St. Albans.]

special "down" on St. Albans—far from it. They wanted an instance of an independent, old-fashioned, and historical borough or city, easily accessible from London; one that would readily afford illustrations of what instructed opinion holds to be good as well as bad in building, town planning, and the like. He says the Association would not have bothered with St. Albans had they not felt that it was fundamentally a distinguished place with a heart of gold, however deeply overlaid with dross, and that it possessed a soul to be saved.

A hasty glance through the guide by even the less amenity-minded of our citizens should immediately provoke discontent and a demand for a better state of things, as the Association intend it should. In these pages are reproduced three illustrations from the guide, underneath which are printed the original captions. The Association will render invaluable service not only to the C.P.R.E., but to the community if they will attempt the diagnoses of the ills of other towns in further guides.

The D.I.A. Cautionary Guide to St. Albans. With fifty-six illustrations. The Design and Industries Association. Price 6d. net.

SCUM ON ROOFING TILES

"A case of scum occurred in roofing tiles made from a clay containing 3 per cent. of calcium carbonate. The tiles were produced in an extrusion machine with a lubricated mouthpiece, and dried and fired without water-smoking. The scum appeared over the whole tile. The materials, including fuel, were analysed as well as tiles fired at different temperatures, and results are given. Contamination due to the tempering water was rectified by the use of other water. The addition of barium carbonate further reduced the amount of the soluble salts. An investigation was made into the effect of firing temperature on the amount of sulphate found in the ware. A large increase in the amount of SO_3 was found after firing to 450° C. After this point a slow decomposition took place."

"Samples with and without barium carbonate were examined after light, medium and hard burning in different positions in the kiln. It was found that the sharper the firing the less the final amount of salt in the ware. Continued firing with a high temperature and slightly reducing conditions produces favourable results, but is impracticable on the score of cost. Intermittent use of reducing conditions was tried, but the reduction in sulphur was inconsiderable.

"Finally, the object in view was achieved by increasing the finishing temperature to cone 03a (1,040° C.). Laboratory tests showed that firing up to this temperature could be effected without injury to the ware, as softening first commenced at cone 6a (1,200° C)." This extract, from *Chemisches Laboratorium für Tonindustrie*, appears with many others on a large variety of building topics in the August-September issue of *Building Science Abstracts*.

The abstracts are classified under twelve headings shown in the table of contents. Within these groups will be found first abstracts of papers primarily of interest to the building industry, the teachers of building science and the manufacturers of building materials, while at the end of each section are grouped abstracts of interest chiefly to research workers. These are followed by book notices and references to patents.

Department of Scientific and Industrial Research *Building Science Abstracts*, Vol. II (new series) No. 8–9, August–September, 1929. Abstracts Nos. 1561–1982. H.M. Stationery Office. Price 1s. 6d. net: annual subscription 10s. net, post free.

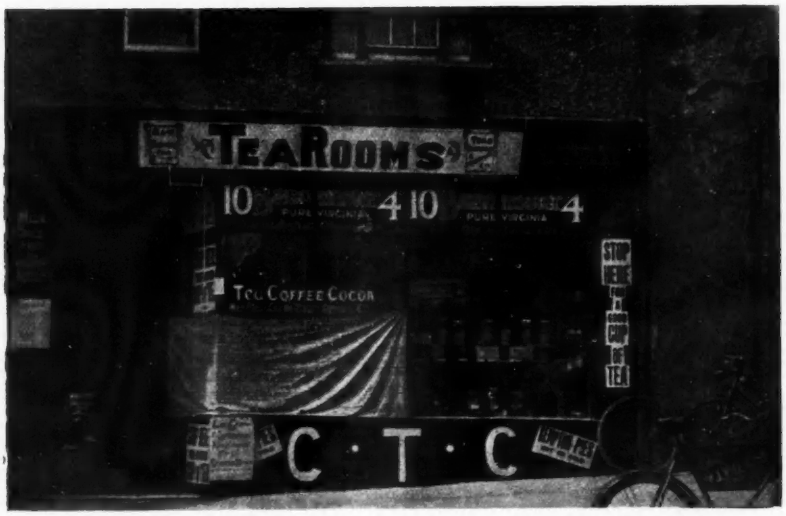
THE ARCHITECTURAL REVIEW

A notable feature of the November issue of *The Architectural Review* is an article by Mr. P. Morton Shand on the "Underground." The writer, with the aid of numerous illustrations, some of which are eloquent contrasts of the old and new stations, describes how "the Underground consistently advertises what it does, or can provide, in a far more intelligent and effective manner than any other big concern offering the public its services or wares."

Another feature of the *Review* is a descriptive article by Mr. Walter Bayes on the "New Head Offices of the Underground Railways at Westminster," together with illustrations and plans of the buildings.

The series of articles on "A History of the English House" is continued by Mr. Nathaniel Lloyd, and deals with the seventeenth-century period, and includes the school of Inigo Jones.

The craftsmanship supplement, which appears monthly, contains an article by Sir Lawrence Weaver on "Decorated Furniture in Laminated Board."



"*Ye Olde Dining Parlour*"—*who would guess it?* [*From* The D.I.A. Cautionary Guide to St. Albans.]

CORRESPONDENCE

THE HONEYWOOD FILE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—As I have stated previously, I much appreciate and enjoy this series on "The Honeywood File," but I should be glad if Karshish would further explain the last paragraph which appears in the October 23 issue.

He states that contractors are entitled to "compensation for cancellation of contract" (with which point I agree), and that "acceptance of a tender constitutes a contract binding on both parties." With which I also agree—as a point of honour. Yet, as far as contractors are concerned, I find this rule of honour is not always observed.

No less than four times in the last seven years contractors have withdrawn their tender to me on seeing the figures which indicated that their tender was low. (I open tenders publicly.)

I have not thought it worth holding them, and in each case accepted the next lowest; but contractors have frequently stated to me, when discussing this matter, that they considered they were entitled to withdraw if they discovered they had made a mistake.

It is an annoyance, of course, but I would prefer a withdrawal to a contractor carrying out a tender at what he knew beforehand would be a loss. There is bound to be skimping and trouble.

But is it a fact that tenders and acceptance are really a *binding* contract?

A. J. M.

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—In "The Honeywood File" for October 30, Spinlove gives the area of glass—three times 3 ft. 6 ins. by 1 ft. 4 ins. equals 16 ft.; and Potch's office boy makes it 15 ft. The correct area is 14 ft. "Squaring" dimensions is evidently, according to Potch, an office boy's job; but the matter seemingly is beyond both Spinlove and Potch, for Potch relies upon the office boy and his work is accepted as correct by Spinlove.

May I suggest that Karshish is at fault here in not drawing attention to what appears a simple matter, but which in actual fact may be the reverse, and in not hinting that Spinlove should have consulted his quantity surveyor first before writing to Potch. Spinlove has consulted him on less important matters. As an example: that of profit. Nor is Tinge's reply to this a satisfactory one. It would imply that $7\frac{1}{2}$ per cent. is a right profit, which is rather arbitrary.

If, as I surmise, these windows are leaded lights, the net area will be something less than 14 ft. super, and may be less than the required minimum. A competent building surveyor would have made certain on this point, nor did Spinlove know that Potch had not done so. Spinlove was fortunate, not only in this, but also in making alterations without first submitting amended plans and obtaining approval thereof. And then there is the point about drains. It should be interesting to learn how Spinlove will deal with these matters should Potch discover them and refuse certificate of completion.

T. SUMNER SMITH

KARSHISH REPLIES

THE HONEYWOOD FILE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Yes, I knew someone would instantly spot Potch's office-boy's mistake, and I am interested to know that that someone is Mr. Sumner Smith. The author manipulated the figures to produce the final nicety (see this week's instalment) until he got giddy and saw double, and then added the error twice over. This sort of thing is often known as "printers' error." Let it stand at that.

Spinlove could not refer this point to the quantity surveyor, for it was no question of quantities or prices: he referred the question of profit to him, rightly, because it was. Tinge says, "$7\frac{1}{2}$ per cent. is about right for profits": the only other thing he could say was that it was wrong, and as he could not say so, unless he was a liar, I do not understand what Mr. Smith's objection is.

I cannot follow the last paragraph. Potch did not deduct the width of the lead cames from the area of windows; he might have done it if it had been necessary for his purpose and he had no atom of self-respect or vanity, I admit, but he *did not do it*. No drains are on Spinlove's conscience. The surveyor always deals with drains before they are covered in, and Honeywood's have been duly and formally passed as the File records. Mr. Smith must remember that every step in the building operations cannot be recorded, or the narrative would be tedious beyond reading. This also is explained in the File. Where nothing to the contrary appears, the normal and satisfactory is, of course, to be understood.

A. J. M. may, perhaps, be excused for not knowing the principle of law upon which the tendering system is based; but I, at any rate, cannot excuse him for not having read his Honeywood File with the deep concentration it deserves.

There is much confusion of mind in his second paragraph. (1) How can "acceptance of a tender constitute a contract"—"as a point of honour"? The terms are contradictory. Obviously, *if* there is a contract, no point of honour fixes the obligation; *if* a point of honour, only, there can be no contract. (2) The Honeywood case is of a contract set up by the acceptance of a tender: how can the builder be entitled to compensation for breach if acceptance of tender does *not* set up a contract? (3) If any contract is by any means set up, how can it touch one party only? Yet, if the builder alone, and not the owner, can claim compensation for breach, the obligations are all on one side and there can be no contract. I am venturing upon refinements of law without authorities at hand, but I believe I am right in saying that the law recognizes no contract, however drawn, unless consideration is given on both sides. This may be a farthing or a pepper-corn, but consideration of some kind there must be.

In his third paragraph the writer shows the same confusion when he contends, as it seems, that acceptance of a tender does not set up a contract for the reason that builders habitually withdraw their tenders; yet the fact that it is the *act of acceptance* which sets up the contract makes it clear that no contract exists *until* after the act of acceptance. Before acceptance, a tender may at any time, and by any means, be withdrawn without reason given; the builders who have frequently contended with A. J. M. that they were entitled to withdraw (unaccepted) tenders were right, and I can imagine those discussions being of the kind that can be readily overheard in the clerks' office.

A. J. M.'s judgment in releasing unwilling *contractors* is sound (*see* Honeywood File), but he has no power to do it. He can, as agent, *advise the owner* to release them; but if he releases without the owner's authority he brings into the field yet a third case of breach of contract, namely, of the implied contract between architect and building owner, as agent and principal. Spinlove sometimes orders goods in his own name, and on one occasion pledges his client without authority, and his errors are pointed out in the commentary.

Mr. Cowles Voysey's appreciation, with which his letter in your last issue opens, gave me particular pleasure; but I definitely join issue with him on the point of adverse criticism. So far as the question he raises is one of

opinion, the subject is too big, and too attractive, to be discussed here; but on the question of fact I also differ. That the professional code is entirely different from the commercial code is surely obvious. I am now reading Bertrand Russell's *Principles of Social Reconstruction*, the thesis of which is, that society is divided by two impulses —the impulse to possess and the impulse to create. That is only a broad and philosophic way of stating a truth that is apparent, I think, to all who are observers of life and not mere participators in it. I am aware of the unpleasant implication which offends Mr. Cowles Voysey's taste—that of snobbishness, or, more exactly, priggishness. It is offensive that a member of one class should hold up his own class to the disparagement of another class; and my self-respect and, I dare say, vanity are involved; but Mr. Cowles Voysey would not turn tail from a serious purpose for such a reason; and will understand my resistance to doing so. I prefer to think, as I feel, that I do not write as a professional man, but as an individual.

KARSHISH

FITZFORD CHURCH

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Fitzford (not Titsford) Church, near Tavistock, does not look its best in the photograph you borrow from a newspaper (issue of October 16), but in reality it is a magnificent building entirely undeserving the scornful note Astragal appended to the illustration. I was in Tavistock when its fate was undecided, and was greatly comforted to learn that should its removal be voted, it would be rebuilt where it could be more useful.

I have no wish to dispute matters of taste, but write with the conviction that Astragal would be surprised at the excellence of the actual building if he saw it. Every part of it is of unusual massiveness and nobility, the construction is of the utmost solidity, and the proportions of one part to another are beyond all praise.

I admit that the details are too literally copied from the primitive Gothic of France; but, if copyism of any sort can be condoned, their vigour and simplicity justify the act. The architect was Henry Clutton, who, with no restrictions as to cost, chose a severe almost ascetic style that cannot have been easily digestible by the Victorian public.

Clutton's masterpiece is the church at Woburn : in London he is not well represented (St. John, Limehouse, and St. Jude, Bethnal Green, are early works, good but scarcely characteristic), but his works are not numerous enough for any typical specimens to be destroyed without great loss. I believe that all lovers of good architecture who have seen Fitzford Church will join with me in wishing it *bon voyage*, and will congratulate its new owners upon the possession of a specimen of Gothic building that few architects of the present age would be capable of producing.

H. S. GOODHART-RENDEL

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

Parliament reassembled for the autumn session on Tuesday, October 29. Mr. Snowden, on that day, indicated that it was hoped to pass a Slum Clearance Bill this session.

Sir George Penny asked the Minister of Transport whether, in view of the annoyance to residents and danger to buildings due to excessive vibration caused by lorries and other heavy motor vehicles using thoroughfares which were not constructed to carry traffic of this nature, he would take powers to prevent such vehicles using these thoroughfares if they did not avail themselves of the special concessions now allowed under the Finance Act, 1928, in respect of vehicles fitted with pneumatic tyres.

Mr. H. Morrison said that there would be considerable difficulty in classifying thoroughfares in the manner which Sir G. Penny had in mind, and he did not consider that it would be practicable, at any rate at present, to impose restrictions such as the hon. member suggested. He believed, however, that, under the existing inducements, there was a steady increase in the proportion of heavy vehicles fitted with pneumatic tyres.

Mr. Albery asked how long it was estimated to take to complete the new Charing Cross station and the temporary bridge over the Thames.

Mr. H. Morrison said that before the construction of the new station and railway works on the southern side of the river could be commenced, it would be necessary to acquire and clear the site and provide the necessary rehousing accommodation for persons of the working classes who would be displaced. It was difficult to give an accurate estimate of the period which it would take to complete the construction of the railway station, railway works, and the temporary bridge; but, assuming that all negotiations proceed satisfactorily, it was estimated that the completion of these works would take not less than five years from the date of the Royal Assent to the Bill.

Sir Kingsley Wood asked the Minister of Health whether he could now make any statement in relation to the continuation and amendment of the Rent and Mortgage Interest Restrictions Act.

Mr. A. Greenwood said it was proposed to provide for the continuance of the Rent Restrictions Acts in their present form by means of the Expiring Laws Continuance Bill, which was now before the House. The question of the amendment of the Acts would receive consideration, but it would not be practicable to introduce amending legislation during the present year.

Asked whether he intended to introduce legislation in regard to London squares, Mr. Greenwood said he proposed to introduce a Bill on the subject this session.

SOCIETIES AND INSTITUTIONS

THE R.I.B.A. LONDON ARCHITECTURE MEDAL

The following communication was issued by the R.I.B.A. on October 28 : The R.I.B.A. medal and diploma for a London building completed between 1926 and 1928 will be presented to Messrs. Easton and Robertson, FF.R.I.B.A., for the Royal Horticultural Society's New Hall, Greycoat Street, Westminster, at the general meeting of the R.I.B.A., to be held on January 6, 1930, and not at the inaugural meeting to be held on November 4, as previously announced.

BRITISH INSTITUTE OF INDUSTRIAL ART

The autumn exhibition of the British Institute of Industrial Art will be held in the North Court of the Victoria and Albert Museum, S.W.7, from November 9 to December 18 (admission free). The main part of the exhibition will consist of examples of British industrial art for the slender purse, including furniture, pottery, textiles, metalwork, and products of the building crafts, and the book and printing trades. The exhibition will also include the Institute's permanent collection of recent work by British artists, craftsmen, and manufacturers ; and a section illustrating certain modern tendencies in European industrial art.

GROWTH OF ARCHITECTURAL EDUCATION

Mr. F. Winton Newman, F.R.I.B.A., president of the Architectural Association, in an address on "Things in general, and the Architectural Association in particular," at the meeting of the A.A., said that with over 270 students in their school the position was very different from that of twenty years ago. The great criticism levelled at the training of those days was that their efforts were little more than a poor imitation of the training an average pupil received in an average architect's office.

There was no doubt, however, that the quiet, restrained influences of those days had played a part in producing

the sound qualities so evident in the smaller buildings and domestic work of today. It had also to be remembered that the whole scheme of architectural education was then in its infancy, and that it was hardly realized that the day school system, started with six students in 1901, would develop in such a manner as to result in the almost complete closing down of articled pupilage in the great towns.

The foremost reason for the change in outlook had been the war, and, resulting from that, the dissent of the present generation from the unquestioned formulas of pre-war days, the tendency to endeavour to solve its own problems and create its own standards of fitness and beauty irrespective of tradition and precedent, with the natural sequence that knowledge of what had been done in the past, did not make the same appeal as an essential part of the equipment of an architect.

THE WONDERS OF BABYLON

Sir Banister Fletcher, P.R.I.B.A., in his lecture at the Central School of Arts and Crafts on Babylonian, Assyrian, and Persian architecture, said that the architecture of Mesopotamia differed much from the Egyptian in character, for it was arched and vaulted and not trabeated, as was inevitable in an alluvial country which supplied clay for the making of bricks to be used in arches and vaults, but no stone for flat beams. In the earliest or Babylonian period every city of the Chaldeans had its lofty ziggurat or holy mountain—a pyramidal observatory-tower with a richly decorated temple chamber on the summit, from which the astrologer-priest could study the heavenly bodies. The ziggurat at Nimround was erected in seven receding terraces, each dedicated to a planet and decorated symbolically in glazed bricks of a different colour.

He said that in the Assyrian period (about 1275–538 B.C.) the chief buildings were the vast palaces for the kings, which were raised on mighty mounds or platforms by hosts of slaves who lived and toiled in the miasmic plain below. The buildings and decorations reflected in a remarkable degree the nature of the country and the building material it supplied, as well as the social and political conditions of that age—the dominance of war-like kings and the subservience of the bond people.

The perishable brick material necessitated by the absence of stone is largely responsible for the disappearance of the buildings, for it has mostly returned to its original clay, leaving only the fine alabaster slabs. British excavations at Khorsabad have revealed the plan of the town and of the Palace of Sargon, twenty-five acres in extent, with its long, narrow apartments suitable for roofing by brick arches. Sir Banister concluded the lecture with an interesting account of the Persian art of Susa and Persepolis.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :

Sun Life Assurance Building (pages 670 to 676). General contractors, Trollope and Colls, Ltd. Sub-contractors : Aston Construction Co., Ltd., steel construction; Norris Warming Co., Ltd., heating and ventilation; G. E. Taylor & Co., electrical equipment; Art Metal Construction Co., hollow steel doors and trim; Fenning & Co., Ltd., marble work; Le Grand Sutcliff and Gell, artesian wells; F. Braby & Co., Ltd., steel stairs; Waygood-Otis, Ltd., lifts; Doulton & Co., Ltd., and Shanks & Co., Ltd., sanitary fittings; John Tann, Ltd., strong room; Crittall Manufacturing Co., Ltd., metal windows; Robert Mitchell & Co., Montreal, and Birmingham Guild, Ltd., bronze work; Chas. Smith & Co., Ltd., ironmongery; Hughes and Lancaster, Ltd., ejectors; Gent & Co., Ltd., clocks; Osler and Faraday, Ltd., lighting fixtures; J. A. King & Co., Ltd., floors; H. W. Cullum & Co., Ltd., acoustic ceilings; Benhams, refrigeration; Roneo Ltd., metal screens.

Palais de Danse, Leicester (pages 684 to 688). General contractors, Bowles and Son. Sub-contractors : Lambourne & Co., Ltd., constructional steelwork; Crittall Manufacturing Co., Ltd., steel windows; Francis Morton, Jun., & Co., spring floor; Johnson and Sons, fibrous plaster; Birmingham Guild, ornamental ironwork; Young, Austen and Young, ventilation; Leicester Corporation Gas Dept., heating; Morrison, Ingram & Co., Ltd., sanitary fittings; Furse & Co., Ltd., electric lighting.

COMPETITION RESULT

Following is the result of the Bradford Central Area Improvement Scheme Competition :—

First place : C. Cowles Voysey. Second place : Arthur Bailey and D. H. McMorran. Third place : T. Harold Hughes. The premiums were £500, £200 and £100 respectively. Special commendations were as follows : Messrs. Basil C. Deacon; L. H. Bucknell and R. Ellis; and Percy Tubbs, Son and Duncan and S. Rowland Pierce.

COMPETITION CALENDAR

November 8. The Somerset Rural Community Council, in conjunction with the R.I.B.A., invite architects and architectural assistants resident in Somerset to submit designs for Country Garages and Petrol Filling Stations. Assessor: Harold E. Todd, A.R.I.B.A. Prizes: The "Sir Charles Wakefield" prize, £10 10s. and silver cup presented by the Somerset Automobile Association Further prizes of £7 7s., £5 5s. and £3 3s. and two cups presented by the S.A.A. Particulars from the Secretary, Somerset Rural Community Council, 42 Bridge Street, Taunton. Deposit 10s. 6d.

December 14. The General Electric Company, Ltd., is to erect a "Pavilion of Light," including a suite of six rooms, at the 1930 *Daily Mail* Ideal Home Exhibition at Olympia, Kensington, S.W. The lounge, dining-room, bedroom, and nursery will be the subjects of one section of the competition for architects and decorative artists, while the kitchen and bathroom will be the basis of another for electrical contractors, with the object of demonstrating the ideal use and security of electrical equipment in these rooms. The assessors are Sir Edwin Lutyens, R.A., Sir Duncan Watson, Messrs. Philip Connard, R.A., Oliver P. Bernard, Douglas G. Tanner, and G. G. Wornum. Prizes will be awarded in three sections as follows : (1) Architects and artists—1st prize, £100; 2nd prize, 20 guineas; ten consolation prizes of ten guineas each for next best work. (2) Electrical contractors—1st prize, 50 guineas; ten consolation prizes value ten guineas each. There will be ten prizes of five guineas for the best Period Designs of Electric Light Fittings. Applications for conditions and particulars of the competition should have been addressed to "Electrical Contractor," *Daily Mail*, Carmelite House, E.C.4, before October 26, 1929. The competition closes on December 14, 1929.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full published specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, London, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

31392. Buckley, J. F. Means for holding unsprung floor joists. October 16.

31700. Cases, M. Heat and sound insulating materials, etc. October 18.

31763. Edwards, M. F. Device for improving acoustical properties of buildings. October 19.

31804. Giraud, A. J. A. Entertainment structures. October 19.

31082. Hutchins, F. Drawing-boards. October 14.

SPECIFICATIONS PUBLISHED

320353. Dyke, H. Method and elements of and apparatus for building construction.

294472. Bauer, Dr. B. Reinforced concrete bridges.

306444. Billner, K. P. Cellular concrete and method of making the same.

320549. Bennett and Sayer, Ltd., and Sayer, N. W. Dies for use in brick-making machines and the like.

320553. Barton, C. H., and Mayson, H. Stud and slab building structures.

ABSTRACT PUBLISHED

318347. Marshall, A. C., and Preist, A. S. Scaffolding.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The Governors of St. Mary's maternity hospital, CROYDON, are to erect new premises at a cost of £13,250.

The CROYDON Corporation is having prepared plans and estimates for the extension of the Thornton Heath baths.

The HENDON U.D.C. has acquired a site on the Watling estate for the erection of an elementary school.

The LAMBETH B.C. has appointed a Special Committee to consider as to the steps to be taken with regard to an extension of the town hall.

The LAMBETH B.C. is acquiring land in Romany Road, West Norwood, for the erection of maisonettes.

The MARYLEBONE B.C. has obtained sanction to borrow £38,000 for alterations and additions at Marylebone Road public baths.

The University of London is raising £18,000, for the purpose of the erection of a new block at the Bedford College for Women, REGENT'S PARK, N.W.1.

In connection with the completion of the County Hall, WESTMINSTER, in accordance with plans already adopted at a cost of £661,500, the L.C.C. recommends a supplemental vote of £25,000 to enable provision to be made for the inclusion of an education library.

Plans passed by the LAMBETH B.C.: Garages, Camden Hill Road, for Mr. E. W. Wallis; garages, Gaskell Street, for Messrs. A. J. Cripps & Co.; layout on site abutting on Wilcox Road, Wandsworth Road and Hartington Road, for Messrs. Cluttons, for the Ecclesiastical Commissioners; building, Lambeth Road, for Mr. H. A. Fletcher; building, Albert Embankment, Salamanca Street and Broad Street, for Messrs. Imrie and Angell; building, site of 233–9 Brixton Road, for Mr. H. M. Wakley; addition to Frederick Hygienic Laundry, Myatt Road, for Mr. R. A. Hinds.

Plans passed by the CROYDON Corporation: fifteen garages, Florida Road, for Mr. R. Pierson; vestry addition, St. John's Church, Shirley Church Road, for Rev. G. C. Rawlins; twenty-four houses, Mitcham Road, for Messrs. Wates, Ltd.; three houses, Brighton Road, for Mr. P. Richardson; alterations and additions, North End, for Messrs. Batchelar and Son, Ltd.; ten houses, Semley Road, for Mr. W. T. Cripps; two houses, Namton Drive, for Mr. R. W. Rodda; extension to warehouse, London Road, for Messrs. Bethell, Swannell and Durnford.

SOUTHERN COUNTIES

The GUILDFORD Corporation has approved a scheme for sewerage prepared by Mr. J. D. Watson, at an estimated cost of £75,000.

The Hampshire Education Committee is to erect a senior elementary school for 320 pupils at CROOKHAM.

Plans passed by the BEXHILL Corporation: House, Mayo Lane, for Mr. C. Purser; house, The Broadwalk, for Mr. G. E. Matthews; two bungalows, Cooden Sea Road, for Mr. Marshall Wood; house, Turkey Road, for Mr. J. Hunt; house, Cooden Drive, for Messrs. Skinner Bros.; bungalow, Haddocks Hill, for Mr. A. Radcliffe; house, Barnhorn Road, for Miss Bayliss; two houses, Holliers Hill, for Mr. J. S. D. Hicks; additions, Normanhurst Hotel, for Mr. R. J. Bray.

Plans passed by the BRIGHTON Corporation: Two bungalows, Elder Row, for Messrs. R. Mitchell and Sons; winter garden and restaurant, 82-83 King's Road for Mr. Henry Sado; four houses, Graham Avenue, for Mr. E. H. Rowe; alterations and additions, St. James's and Southern Hotel, St. James's Street, for Messrs. Edlin Bros., Ltd.; extension, 15-16 Portland Place, for Kemp Town Brewery; home for children, Brighton Road, Rottingdean, for Old Roedeanians' Association; additions and extension, Rottingdean School, for Messrs. E. F. Shepherd and J. Maxwell Hyslop; additions, Black Lion Hotel, Patcham, for Mr. G. R. Beard; layout, "Cedars estate," Withdean, for Mr. H. A. Costerton

Plans passed by the GUILDFORD Corporation: New estate, Ganghill Copse, London Road, for Mr. A. C. Burlingham; two houses, Ganghill Copse, for the Onyx County Estates, Ltd.; additions to bottling store, Commercial Road, for Messrs. Friary, Holroyd and Healy's Breweries, Ltd.; additions, Malabar House, Epsom Road, for Mrs. Poole; alterations, 182 High Street, for Messrs. Headley Heath, Ltd.; showroom and workshop, Stoke Fields, for Messrs. Challen and Halsey; house, London Road, for Miss E. K. Dyer; road, off Monor Road, for Messrs. W. & J. Spooner; two houses, Grange Road, for Mr. O'Donnell Grimshaw; alterations and additions, 5 South Street, for Messrs. Chas. Hammerton & Co.; building estate, Manor Road, for Messrs. W. & J. Spooner; layout of Ardmore Estate, Worplesdon Road, for Messrs. Folker and Horton; shops and offices, Woodbridge Road, for Mr. H. J. Foot; showroom, Stoke Fields, for Haydon Furnishing Co.

SOUTH-WESTERN COUNTIES

The TORQUAY Corporation Health Committee has received sanction to borrow £10,433, for extension to the isolation hospital.

Preliminary plans of a motor coach station, proposed to be erected for Black and White Motorways, Ltd., in Rodney Road, CHELTENHAM, have been prepared by Mr. Yates.

Plans passed by the TORQUAY Corporation: Shop, 38 Torhill Road, for Mr. A. Saville; house, Hatfield Road, for Messrs. Stuckey and Devey; bungalow, Teignmouth Road, for Miss Hardwick; bungalow, Isaac's Hill, Barton, for Mr. P. Sharam; three houses, Barton Hill Road, for Mr. S. England; two bungalows, Boundary Road, for Chelston Building Co.; new vestry, Barton Church, Barton Hill Road, for St. Marychurch Church Council; bungalow, Wynn Estate, Maidencombe, for Mr. E. Hayes; additions, Palace Hotel, Babbacombe Road, for Mr. G. Hands.

Plans passed at POOLE: Dwelling house, Harbour Hill Road, for W. C. Ware; two dwelling houses, Harbour Hill Road, for Corbin and Clark; dwelling house, Dorchester Road, and dwelling house (two flats), Alder Road, for C. R. Symonds; dwelling house, Uppleby Road, for E. Pitcher; dwelling house, Harbour Hill Road, for J. Jagger; dwelling house, Stanley Green Road, for Baker, Son and Baker; extension to garage and dwelling house, Fernside Road, for R. Thorne; seven dwelling houses, Hoyal Road, for R. Meech; dwelling house, Hill Road, for S. B. Bracher; dwelling house and garage, Cynthia Road, for D. Thomas; dwelling house, Pound Lane, for C. C. G. Osborne; dwelling house, Canford Cliffs Road, for Mrs. James; dwelling house, Winston Avenue, for C. R. Mulley; dwelling house, Woodlands Avenue, for J. Jagger; two dwelling houses, Alder Road, for Rosser and Sturman; dwelling house, Woodlands Avenue, for E. King; two dwelling houses, Ringwood Road, for Corbin and Clark; store addition and conservatory to shop and dwelling house, Wimborne Road, for H. Kendall; dwelling house, Fernside Road, for Bromby Bros.; dwelling house, Blake Dene Road, for W. B. Chinchen; addition to dwelling house, "Owlshott," Western Road, for Mrs. D. C. Robinson; amended block plan of dwelling house, Harbour Hill Road, for W. G. Crane; dwelling house, corner Churchill Road and Victoria Crescent, for Brailsford and Wood, Ltd.; dwelling house, Albert Avenue, and dwelling house, Sunnyside Road, for P. J. Pooss; dwelling house, Harbour Hill Road, for J. Francis; dwelling house, Alder Road, for Rosser and Sturman; thirty-two semi-detached dwelling houses, Alder Road, for P. V. Seward; alterations and additions to dwelling house, "Corfu," Chaddesley Road, for Hawker, Mountain and Bailey; garage, "Laurel Cottage," St. Peter's Road, for H. Kendall; garage and livery room, "Rossmore Lodge," Rossmore Avenue, for W. Southgate and Sons; workshop and office, Bournemouth Road, for A. R. Emery; dwelling house, off Canford Cliffs Road, for S. Tugwell; pair semi-detached dwelling houses, Enfield Road, for L. J. Newell and Sons; proposed new roads, off Lake Road and Blandford Road, for Ventress and Son; twelve dwelling houses, Hoyal Road, for R. Meech; dwelling house and garage, Twemlow Avenue, for Brailsford and Wood, Ltd.; dwelling house, Harbour Hill Road, and dwelling house, Houlton Road, for W. G. Crane & Son; amended drainage plan and five dwelling houses, Lincoln Road, for C. B. Hann; amended drainage plan of dwelling house, York Road, for P. J. Pooss; dwelling house, corner Guest and Norman Avenues, for T. Ventress; two dwelling houses, Hennings Park Road, for W. A. Green; alterations and additions, 19 Grand Parade, Haven Road, for A. Marshall; alterations and additions, 163 High Street, for H. R. Collins; garage, Caledon Road, for M. M. S. Hardy; garage, "Awkley," Uppleby Road, for T. Heath; two garages, "The Corner House," Ravine and Haven Roads, for Spencer de Horsey; garage, "Hexgreave House," Purbeck Road, for C. D. Inman; garage, "Sinclair," Churchill Road, for R. Cooper; garage, "Bramley," Dorchester Road, for E. W. Budgen; garage, 1 Approach Road, for R. Owen; cycle and coal shed, Harbour Hill Road, for F. Coulton; offices, Alder Road, for W. H. Carr; garage, "White Cottage," Greenwood Avenue, for E. P. Oscroft; dressing-room, Alder Road, for S. G. Ward; garage, "White Lodge," Branksea Avenue for Douglas Young & Co.

EASTERN COUNTIES

Plans passed by the CHELMSFORD Corporation: Heating chamber, Victoria Road, for the Chelmsford Egg Factory; alterations and additions, Springfield Road, for the Co-operative Society, Ltd.; forty garages, Sandford Road Estate, for the Allied Building Corporation; two houses Goldlay Avenue, for Mr. W. Campen.



First Church of Christ Scientist, Victoria Avenue, Harrogate. Designed by Frank Tranmer. The building is of stone. For ground-floor plan, see page 695.

MIDLAND COUNTIES

A scheme has been prepared by the LEICESTER Corporation for the erection of a swimming bath at £57,000, and turkish baths at £3,000.

The LEICESTER Corporation is to construct the second line of water pipes between Sawley and Hallgates, at an estimated cost of £254,000.

The SMETHWICK Corporation has approved plans for the erection of new law courts on a site at the junction of Crocketts Land and Piddock Road, at an estimated cost of £15,000.

The SMETHWICK Corporation has approved plans for the erection of thirty-eight houses on the Brisbane Road estate, and has authorized the borough engineer to erect twelve houses by direct labour at the Hamilton Road estate.

Plans passed by the SMETHWICK Corporation: Alterations, 274 and 276 Hales Lane, for Mr. T. York; alterations, 620 Bearwood Road, for Messrs. England and Sons; four houses, Heather Road, for Messrs. H. P. & R. G. Strong; alterations, 38 Cape Hill, for Messrs. Sanders Bros.; engine house, George Street, for the United Spring Co., Ltd.; alterations, 58 Cape Hill, for Messrs. J. Harris and Sons; new road off Mallin Street, for Messrs. Wm. Lees and Sons.

NORTHERN COUNTIES

The SHIPLEY U.D.C. has decided to take the necessary steps to secure sanction for the erection of the new public offices on the Manor House site.

The SHIPLEY U.D.C. is to negotiate for sites at Busy Lane and Carr Lane, suitable for the rection of about eighty houses.

The MANCHESTER Corporation recommends seeking the requisite powers for borrowing £731,000 for the town hall extension scheme.

The BOLTON Corporation has approved the lay-out of the Cameron estate for the erection of fifty-eight houses.

The TYNEMOUTH Corporation has prepared schemes for new water mains, at a total cost of £123,000.

The CARLISLE Corporation has obtained sanction to borrow £77,855 for the erection of an additional 250 houses.

The MANCHESTER Corporation recommends obtaining a site near the Royal Infirmary for the erection of a venereal diseases clinic, which the city architect estimates will cost £30,000.

Mr. Henry Price, the MANCHESTER city architect, has prepared a scheme for improving the water supply at the Abergele sanatorium at a cost of £14,000.

The BRADFORD Corporation recommends the purchase of property from the Bradford Dyers' Association, at a cost of £36,000, for purposes of extensions at the Valley Road power station.

The MANCHESTER Corporation is to erect eighteen houses on the Blackley estate at a cost of £9,080, and 142 houses on the Wythenshawe estate at a cost of £62,621.

The MANCHESTER Corporation has adopted lay-out plans for houses on the Chorlton and Wythenshawe estates, and decided upon erection by direct labour.

The BLYTH Corporation Housing Committee has authorized the borough engineer to report upon a scheme for the erection of further houses in Eighth and Twelfth Avenues, and for the erection of 100 houses in the vicinity of Morpeth Road.

Plans passed by the SOUTH SHIELDS Corporation: Alterations, Nook Hotel, Harton, for Mr. F. W. Newby; five garages, Southey Street, for Mr. Frank Ademson; shop, Boldon Lane, Harton, for the Boldon Industrial Co-operative Society, Ltd.

Plans passed by the SHIPLEY U.D.C.: Two houses, Bradford Road, for Mr. J. Chippindale; two houses, Cottingley Cliffe Road, for Messrs. A. and J. Chippindale; two bungalows, Thackley Old Road, for Messrs Mellor and Booth; new streets, south-east of Leeds Road, for Messrs. Mellor and Booth.

Plans passed by the OLDHAM Corporation: Shop, Market Place, for Messrs. Montague Burton, Ltd.; two houses, Oriel Avenue, for Messrs. Hawthorne and W. & H. Bloor; six houses, Frederick Street, for Messrs. A. Redfern and Sons; seven houses, Cleeve Road, for Mr. F. Thompson; stores, Smith Street, for Messrs. W. Lees (Oldham), Ltd.

Plans passed by the CARLISLE Corporation: Eight houses, Harraby, for Messrs. Benwell and Slack, architects; alterations, Fisher Street, for Loco. Men's Club; two shops and cottage, Raffles Avenue, for Mr. S. W. B. Jack, architect; extensions, Botchergate, for Mr. G. Gunn, architect, on behalf of Carlisle Picture House, Ltd.; pump house, Dalston Road depot, for Mr. G. Gunn, on behalf of British Petroleum Co.

Plans passed by the TYNEMOUTH Corporation: Eight houses, Wansbeck Avenue, for Mr. W. Stockdale; six houses, Links Road, Cullercoats, for Mr. H. Jewels; extension of vestry, Holy Saviour's Church, for Messrs. Wood and Oakley; two houses, Ashleight Grove, for Mr. A. K. Tasker; alterations, "Sir Colin Campbell" public-house, Saville Street, for Messrs. F. R. N. Haswell and Son; two houses, Creswell Avenue, North Shields, for Mr. A. K. Tasker; two houses, Hawkey's Lane Estate, for Messrs. F. R. N. Haswell and Son; fifteen houses, Balmoral Gardens, North Shields, for Mr. A. K. Tasker; alterations and additions, Primitive Methodist Chapel, Saville Street, North Shields, for Messrs. Woolworths, Ltd.

Plans passed by the BOLTON Corporation: Two houses, Chorley New Road, Lostock, for Mr. C. Haywood; house, St. Helens Road, for Mr. R. Stott; two houses, Green Lane, for Mr. W. E. Yates; extension, Parochial Hall, St. Osmund's, Long Lane, for the Rev. Father C. Crisp; workshop, Hibbert Street, for Mr. Robert Scholes; house, St. Helens Road, for Mr. James Hateson; house, Plodder Lane, for Messrs. Byrom Brothers; three houses, Coverdale Avenue, for Messrs. W. Gornall and Sons, Ltd.; four houses, Higher Swan Lane, for Mr. Wm. Reddyhough; extension to club house, off Bury Road, Breightmet, for Breightmet United F.C.; two houses, Junction Road, for Mr. P. Booth; house, Lostock Junction Lane, for Mr. Wilfred Andrew; two houses, Plodder Lane, for Messrs. Byrom Brothers.

SCOTLAND

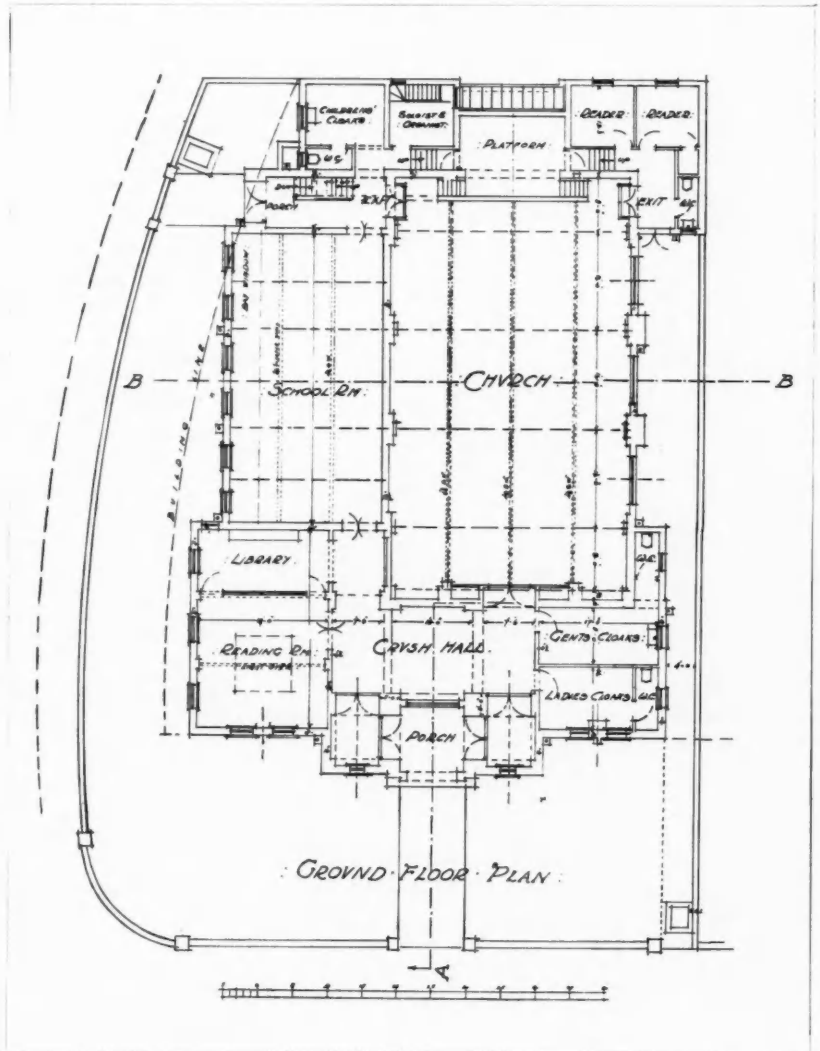
The GLASGOW Education Committee is to erect a school at Cloverhill Knightswood.

The GLASGOW Education Committee is to erect an elementary school, janitor's house, and offices at Leighton Street, Ruchill.

The L.M. and S. Railway Company is to construct a new steel span in continuation of the steel span which carries Dobbie's Loan over the railway lines leading to the company's goods station, GLASGOW.

Plans passed by the GLASGOW Corporation: Twenty-nine houses, Victoria Drive, for Messrs. W. and G. Taylor; seventeen bungalows, Aikenhead Road, for Messrs. Mactaggart and Mickel, Ltd.; house, Cardonald, for Messrs. John Young & Co., Ltd.; building, Sauchiehall Street, for Messrs. F. W. Woolworth & Co., Ltd.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to September 30, 1929: 1919 Act, 25,129; 1919 Act, by public utility societies, 421; private subsidy schemes (1919 Additional Powers Act), 2,324; slum clearance schemes, 10,546; under construction, 2,058; 1923 Act, by local authorities, 4,012; 1923 Act, by private enterprise, 17,063; under construction, 1,332; 1923 Act, by public utility societies, 80; 1924 Act, by local authorities, 38,817; under construction, 6,573; 1924 Act, by private enterprise, 1,343; under construction, 851; 1924 Act, by public utility societies, 127; demonstration houses, 17; steel houses erected on behalf of Government by Scottish National Housing Company, 2,552. Total completed, 102,431; total under construction, 10,814; complete total, 113,245.



First Church of Christ Scientist, Victoria Avenue, Harrogate. Designed by Frank Tranmer. Ground-floor plan. On the first floor, immediately above the schoolroom, are various classrooms and a boardroom. The church itself is taken up to the ceiling of the first floor.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_1	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_2	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_1	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.			£0	11	6
Thames ballast, per yd.			0	10	0
Pit gravel, per yd.			0	15	0
Pit sand, per yd.			0	12	6
Washed sand, per yd.			0	13	0
Screened ballast or gravel, add 10 per cent. per yd.					
Clinker, breeze, etc., prices according to locality.					
Portland cement, per ton			£2	8	0
Lias lime, per ton			2	0	0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.					
Transport hire per day:					
Cart and horse	£1 3 0	*Trailer*	£0	15	0
3-ton motor lorry	3 15 0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4 0 0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¾ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	*Med. Green*
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard			
Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6

PITCH PINE, add 33⅓ per cent.

FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1⅛ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 9½d. *per hour;* MATE, *do.* 1s. 4d. *per hour;* ERECTOR, 1s. 9½d. *per hour;* FITTER, 1s. 9½d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1s. 9½d. *per hour;* MATE OR LABOURER, 1s. 4½d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in. per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 11½d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 8d. *per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal spar, 1s. 6d. to 2s. per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1s. 8d. *per hour;* LABOURER, 1s. 4d. *per hour;* FRENCH POLISHER, 1s. 9d. *per hour;* PAPERHANGER, 1s. 8d. *per hour.*

Genuine white lead, per cwt.	£2	17	0
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	3
Liquid driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	16	0
DO., *flat, per gall.*	0	16	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.

The measured work price is on the same basis . . . per ft. sup. | £0 | 0 | 1½

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to | 0 | 0 | 6

Plaster-board, per yd. sup. . from | 0 | 1 | 7

PLASTER-BOARD, fixed as last, per yd. sup. . . . . from | 0 | 2 | 8

Asbestos sheeting, 5/32 in., grey flat, per yd. sup. | 0 | 2 | 3

DO., *corrugated, per yd. sup.* | 0 | 3 | 3

ASBESTOS SHEETING, fixed as last, flat, per yd. sup | 0 | 4 | 0

DO., corrugated, per yd. sup. | 0 | 5 | 0

ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey | 2 | 15 | 0

DO., red | 3 | 0 | 0

Asbestos cement slates or tiles, 5/32 in. punched per M. grey | 16 | 0 | 0

DO., *red* | 18 | 0 | 0

ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup. | 0 | 7 | 0

DO., ½ in. thick, suitable for domestic work, unpolished, per yd. | 0 | 6 | 6

Metal casements for wood frames, domestic sizes, per ft. sup. | 0 | 1 | 6

DO., *in metal frames, per ft. sup.* | 0 | 1 | 9

HANGING only metal casements in, but not including wood frames, each | 0 | 2 | 10

BUILDING in metal casement frames, per ft. sup. | 0 | 0 | 7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			⅝ in.			¾ in.		
Qualities	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	5½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	5½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, NOVEMBER 13

BRADFORD CENTRAL AREA IMPROVEMENT SCHEME. Continuation of Exhibition of the Designs at Telegraph Chambers, Market Street, Bradford, until Saturday, November 23. 10 a.m. till 8 p.m. **10 a.m.**

WESTMINSTER SCHOOL HALL (entrance in Dean's Yard). "My Solo Flight to Australia." By Squadron-Leader Hinkler, A.F.C., F.S.M., R.A.A.F. Chairman, Col. The Master of Sempill, A.F.C. **5.30 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. "New Developments in Hydraulic Pneumatic Engineering." By J. O. Boving. **8 p.m.**

THURSDAY, NOVEMBER 14

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Science Standing Committee.

GEFFRYE MUSEUM, Kingsland Road, E.2 Lantern lecture on "Wood-working Machinery." By Stafford Ransome, M.INST.C.E. **7.30 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Fourth of a course of eight Public Lectures. "Delos," Dr. Ernest A. Gardner. **5 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "The Windows of a Medieval Church, and their Treatment as a Pictorial Scheme" (with illustrations from Great Malvern Priory). By G. McN. Rushforth, R.S.A. **5.30—6.30 p.m.**

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. Meeting to be held at Caxton Hall, S.W.1. "The Manufacture and Standardisation of Eye-protective Glasses." By Dr. W. M. Hampton, B.SC. **7.30 p.m.**

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last day for entry for Carpenters' Company's Examinations (Sanitary Building Construction).

FRIDAY, NOVEMBER 15

ARCHITECTURE CLUB. Sixteenth annual dinner at the Savoy Hotel. 7.15 for 7.30. **7.30 p.m.**

ARCHITECTURAL ASSOCIATION SCHOOLS, 34 Bedford Square, W.C.1. "Romance of Lead in Industry." By E. Holden, F.COLL.H. **3 p.m.**

MORLEY COLLEGE, Westminster Bridge Road, S.E.1. "Housing." By E. D. Simon, M.P. **8 p.m.**

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Smoke and Health." By John S. Taylor, M.D., D.P.H.

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. At the Town Hall, Carlisle. Sessional Meeting. Discussion on "Town Planning of Built-Up Areas," to be opened by Percy Dalton, A.M.INST.C.E., A.R.I.B.A. **7.30 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Greek Sculpture: II (Elgin Marbles)." By Cecil Hallett, B.A., F.S.A. **3 p.m.**

LONDON SOCIETY. Lecture in the Hall of the Royal Society of Arts, John Street, Adelphi, on "The Royal and Mediæval Tombs of Westminster Abbey." By Lawrence E. Tanner, F.S.A. **5 p.m.**

SATURDAY, NOVEMBER 16

Sunrise, 7.19. Sunset, 4.10.

ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Informal Visit to Houses of Parliament. Meet at Norman Porch, Victoria Tower, at 2.30 p.m. **2.30 p.m.**

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. At Carlisle: visits to the premises of the Nestlé and Anglo-Swiss Condensed Milk Co., the City of Carlisle New Electricity Works, the New Gas Works, and the new housing schemes of the Carlisle Corporation. Meet at the Town Hall at 9.30 a.m. **9.30 a.m.**

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS. Visit to County Hall, S.E.1. Meet in Main Hall, Belvedere Road, at 2 p.m, Special Exhibition of Prints. Ladies invited. **2 p.m.**

MONDAY, NOVEMBER 18

R.I.B.A., 9 Conduit Street, W.1. Meeting of Executive Committee. 4 p.m. General Meeting, with Paper by Alan E. Munby, M.A., F.R.I.B.A., on "The Design of Science Buildings." 8 p.m. Exhibition of the Work of the late Bertram Goodhue, until November 30. Open daily, between 10 a.m. and 8 p.m., Saturdays 5 p.m. Licentiate Examination to qualify for nomination for Fellowship until Friday, November 22.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture." By L. O. Faraker. **12 noon**

PUBLIC WORKS, ROADS AND TRANSPORT CONGRESS AND EXHIBITION (1929), Royal Agricultural Hall, Islington, N., until November 23. **10 a.m. to 7 p.m.**

TUESDAY, NOVEMBER 19

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Ordinary Meeting. Paper to be submitted for discussion: "Some Experimental Methods and Apparatus for Determining the Stresses in Bridges and Framed Structures." By Professor Ernest George Coker, M.A., D.SC., F.R.S., M.INST.C.E. **6 p.m.**

WEDNESDAY, NOVEMBER 20

WESTMINSTER CITY SCHOOL, Palace Street, Victoria Street, S.W.1. "My Experiences of Magic in West Africa." By Lady Dorothy Mills. **5.30 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Shop Fronts and Shop Signs." By Hastwell Grayson, M.A.

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. "The Protection of Rural England." By P. Morley Horder. **8 p.m.**

THURSDAY, NOVEMBER 21

GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "Mouldings—Their Proportion and Place in Design." By E. J. Warne. **7 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Fifth of a course of eight Public Lectures. "Delphi." By Ernest A. Gardner. **5 p.m.**

NORTHERN POLYTECHNIC, Holloway, N.7. "Modern Architecture." By Howard Robertson, S.A.D.G., F.R.I.B.A. **7 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "The Van Eycks." By Maurice W. Brockwell. **5.30—6.30 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Origin of Architecture: II." By Cecil Hallett, B.A., F.S.A. **12 noon**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "Low-Temperature Carbonization of Fuel, with special reference to its combination with the production of Electricity." Introductory papers by E. H. Smythe and E. G. Weeks (English Practice); S. McEwen (American Practice); Prof. Dr. Ing. P. Rosin (German Practice). Light refreshments at 5.30 p.m. **6 p.m.**

FRIDAY, NOVEMBER 22

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Smokeless Fuels." By William Gibson. M.SC.TECH.A.I.C. **7 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee.

SATURDAY, NOVEMBER 23

Sunrise, 7.33 a.m. Sunset, 4 p.m.

MONDAY, NOVEMBER 25

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "The A.A. Excursion to Germany." By E. R. Jarrett, A.R.I.B.A. **8 p.m.**

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last day for entry for Institution of Structural Engineers' Examinations.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chinese Porcelain." By L. O. Faraker. **12 noon**

WEDNESDAY, NOVEMBER 27

WESTMINSTER CITY SCHOOL, Palace Street, S.W.1. "By Car From Nile to Niger and Across the Sahara." By Owen Tweedy. **5.30 p.m.**

THURSDAY, NOVEMBER 28

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee.

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Sixth of a course of eight Public Lectures. "Eleusis." By Dr. Ernest A. Gardner. **5 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Painters of the Norwich School." By S. C. Kaines Smith, M.B.E. **5.30—6.30 p.m.**

SATURDAY, NOVEMBER 30

Sunrise, 7.44 a.m. Sunset, 3.53 p.m.

MONDAY, DECEMBER 2

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By L. O. Faraker. **12 noon**

WEDNESDAY, DECEMBER 4

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Some Architectural Poisons Abroad." By A. Trystan Edwards.

THURSDAY, DECEMBER 5

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, W.1. "Some Notes on Modern Steel-frame Construction." By W. C. Cocking. **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Lettering." By Eric Gill. **5.30—6.30 p.m.**

THE GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Sir Christopher Wren and his Influence on the Craftsmen of his Time." By Percy Lovell. **7.30 p.m.**

UNIVERSITY OF LONDON, University College. "Shelley and Italy." A Public Lecture, by Prof. Edmund G. Gardner, F.B.A. **5.30 p.m.**

THURSDAY, DECEMBER 12

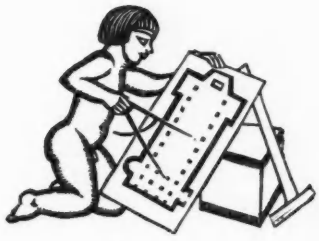
GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Veneering, Past and Present." By C. A. Hindley. **7.30 p.m.**



LIGHT AND SOUND IN FANCY DRESS

In designing the auditorium of Welwyn Theatre, the architects, Louis de Soissons and A. W. Kenyon, seized on the acoustical features and exploited them as new motives of decoration. A case in point is provided by the large reflectors, shown in the illustration, which rise the full height of the side walls. Each reflector is made up of small units of rolled plate-glass with a broken surface, each unit being edged with vermilion and tilted slightly forwards. These small reflectors are enclosed in a frame comprising bands of blue, green, cinnamon, and yellow, the outside line being carried up with rhythmic serrations bounded by a green fillet. The whole is surmounted by a boldly projecting canopy of polished wood, from which hangs a deep valance of brown colour, edged with apple-green silk. The wall has a grey background, traversed with bands of cinnamon-brown, edged with thin lines of apple-green (see also page 714).

THE ARCHITECTS' JOURNAL



WEDNESDAY, NOVEMBER 13, 1929

CINDERELLA OR PRINCESS?

" Look at our fine princess, now. See how she has dressed herself ! "

CINDERELLA.

IS the type of building designed for cinematograph entertainments a Cinderella or a Princess of architecture ? Or does it occupy an intermediate position ? These are questions which the reader of this special issue of the JOURNAL will perhaps be enabled to answer, since for the first time there are here collected the most important cinema designs, both native and foreign, executed in recent years. In attempting to answer it, one must bear in mind a certain distinction brought about by the evolution of *plutocracy*. In the days when the fable of Cinderella and the Princesses was written it was assumed that the latter, being rich, would naturally be most beautifully dressed. They had the money necessary for this purpose, and it was taken for granted that where money was, " art " made its appearance as certainly as the fruit follows the flower. That was a very nice, simple age. But, alas! today we do not so easily rush to the conclusion that expensive things are beautiful. On the other hand, we may congratulate ourselves that we no longer see any particular virtue in poverty.

Cinema proprietors are rich, and we welcome the fact that they are willing to spend their riches on architecture. Some of the critics, whose views we print, appear to imagine that this very superfluity of wealth is, as it were, a stumbling-block, and contributes to the vulgarity so commonly to be found in cinema designs. But a vulgar artist will be equally vulgar whether he has little or much money to spend on a building. No serious critic of architecture will object because cinema interiors are ornate. If we are not to find ornateness in the interiors of theatres and picture palaces, where are we to find it ? For hither people come in festive mood. Many of them are from poor homes, and are cheered by a spectacle of luxury and splendour. What is wrong with luxury and splendour ? Why, nothing at all ! Now luxury in the sense of comfort our cinema proprietors do provide, though here it may be noted that even this element of theatre design is dependent upon the capacity of an architect to plan well, and to provide the necessary conditions for good seeing and hearing. As for splendour, doubtless the " exhibitors " aim at something that they take for it. True splendour, however, is an abstract quality, not to be bought for money, be the expenditure never so lavish. What they can buy is ostentation—and that they will have, as many an architect has learnt, to his cost.

Splendour, indeed, is a noble word, and it ought not to be lightly said that any particular building has splendour. For not only a superfluity of wealth but a considerable measure of good taste is required before the phenomenon of splendour can come into being. The Coliseum had splendour, and the great Roman baths also possessed this attribute. And why not the modern cinema ? It is not a question of more or less ornament or of any special style in ornament. It would be a foolish classification, therefore, to divide the cinema designs into " traditionalist " and " modernist." Some of the cinemas designed in the latter manner have been likened to a morgue, so plain and forbidding are their interiors. But it is just as possible to have a classic morgue as a modernist morgue. This fashion for morgues, so much in favour among the Continental cinema designers, is a very silly one, for there is no special virtue in emptiness, even if this be described as " severity." Provided that the ornament is well-composed, most people like to see the maximum of ornament in both theatre and picture palace.

It is not only in the composition of the ornament, but in the composition of the main features of the interior that modern designs are often faulty. The walls are not modulated to take cognizance of the balcony ; the boxes or else the organ grilles take no cognizance of the proscenium arch. It is all a question of composition, and no twentieth-century fads or fancies will compensate for the lack of organic principles of design. In the outside of the cinematograph building also we need more and better composition and better architectural manners than it is at present customary to display.

NEWS & TOPICS

UNEMPLOYMENT, BUILDING AND ARCHITECTURE

WHEN Mr. J. H. Thomas outlined his proposals for dealing with the unemployment problem, a certain disappointment was expressed on the ground that the actual number of men who would be engaged to give their labour in the various projects he mentioned would not be very great. In particular, it was pointed out that the hastening of the building operations connected with the London bridges would absorb only a tiny fraction of the unemployed in the building and engineering trades. It may be assumed, of course, that Mr. Thomas will supplement his present proposals by others, and in the event of his doing this he may discover that there is no more profitable way of employing labour for the country's good than by the encouragement of such building operations as may be necessary both for the extension of industry and commerce and for the better housing of the population.

★

The Government has, as yet, been so busily engaged in settling outstanding matters of foreign politics that we may have to wait some little time before it can give undivided attention to matters nearer home. It cannot be too often insisted upon, however, that the relationship between statesmanship and architecture is a very close one, and past history shows that the prestige of rulers and governments has been greatly enhanced when they have lent their energies to the creation of great architectural works, and made the cities of their native lands as noble as they knew how.

CHARING CROSS BRIDGE

The clouds which shrouded from public view the deliberations of the L.C.C., the Ministry of Transport, and the Southern Railway in connection with Charing Cross Bridge have parted a little, vouchsafing to the curious a view of Sir Edwin Lutyens reclining on a nimbus with a model of the completed bridge in his hand. At this new-minted godhead impious and unbelieving ones launch their bolts of fire. Does not this new bridge, carrying its millions over the river, does it not pour them forth where already the millions congregate? Is there no simpler, less mechanical solution? There was talk of a competition, and a search for the best. Was that but talk?

PROFESSOR WORTHINGTON'S PARIS LECTURE

I hear that Professor Hubert Worthington, of Manchester, is shortly to give a lecture at the Guild of the British Institute in Paris, of which Lord Derby, Lord Crewe, and Lord Hardinge are trustees. This Guild receives the financial support of the Universities of Manchester and Liverpool, and of all other Universities and University Colleges in Great Britain. The R.I.B.A. is a subscriber. Professor Worthington was for some time Professor of Architecture at the Royal College of Art, which is the only educational institution under the direct control of the Board of Education. On the suggestion of Sir Aubrey Symonds, the Permanent Secretary to the Board of Education, and the Chairman of the Educational Committee of the British Institute in Paris, Professor Worthington is to visit Paris as a lecturer.

STEEL HOUSES AGAIN

Steel houses are on the ramp in France. At Paris a steel house, purporting to cost £368, with drainage, gas and electricity included, is being shown on exhibition. It consists of living-room, three bedrooms, and good kitchen, with bath; looks like an ordinary cottage, and can be built in three weeks, but will be many years in its process of disintegration. Thank goodness, we have the sound conservatism to prefer brick and tile and other trusted friends. Thank goodness, our own "steel house" ramp was a boomerang to its money-making sponsors.

GEOMETRY AND ARCHITECTURE

To be in the intellectual vanguard of architecture one must despise all existing forms and all the shapes into which houses have commonly been moulded. A round house has been the pet fancy of many an architect since first geometry excited man's brain with dreams of fatuous perfection. Modernity advances towards the sphere and cylinder, with other and more costly geometric figures to follow at decent intervals. In Copenhagen a "House of the Future" (*sic*) has been built in the form of a cylinder.

★

One gathers from Fleet Street's animated but disjointed account that it provides safe harbour for a maximum of labour-saving devices, including a pneumatic tube for the dispatch of business letters direct from home to office. Imagine the £1,000-house owner hurrying from the office in order to be able to dispatch an important letter through his private tube! Need one add that there is wireless and television in every room; that plates wash themselves; tables draw out from walls, and so on, as far as mind can reach. The thing presents as complete a negation of human life and full-bodied living as the brain of child-man is capable of producing. Quite apart from this, the figures are faked. Such "architecture" is really very expensive.

AN ARCHITECT ON ENGINEERS

Every now and again an engineer rises from anonimity to attack us. Professor Reilly received the last missile in the shape of a very thorough-going indictment of architects in general, and, in particular, their inability to do more than add a touch of meretricious ornament to the noble structures of the engineer. The protagonist in question, in the course of his argument, held that St. George's Hall, Liverpool, was a worthless piece of plagiarism, and that the new cathedral should be razed to the ground. He gave one to understand that he hated architects because they had all the jolly things to do—and did them badly. Professor Reilly, in disposing of these arguments, says: "In all building operations, where civilized and urbane conditions are required, the engineers have always been, and must be, the servants of the architect."

NINEPENCE A TIME!

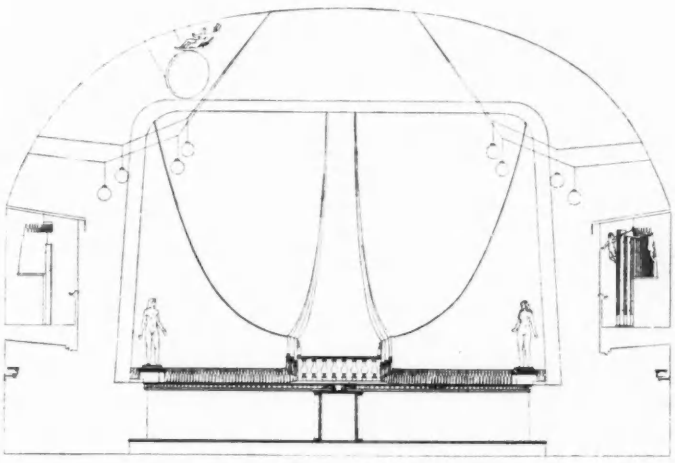
The world is full of peculiar subterranean occupations, of which the following is a quite cloacine example. A hire-purchase agency in the City writes to a member of the Institute offering him ninepence a time for reports on the financial status of intending purchasers, *with approximate value of their furniture!* Was anything, anywhere, ever more depraved? And only ninepence a time!

ADAM AND ORIGINAL SIN

The architectural education of the lower masses goes forward from strength to strength. Last week thieves entered a house in Portland Place during the lunch-hour and carried away two complete Adam mantelpieces.

ASTRAGAL

THE ILLUSTRATIONS INTERSPERSED IN THE DEBATE OPENED ON THIS PAGE ARE OF THE SKANDIA CINEMA, STOCKHOLM, SWEDEN, HELD UP AS BEING A CONSPICUOUS EXAMPLE OF THE PICTURE-THEATRE BEAUTIFUL.



A cross-sectional drawing of the Skandia Cinema, looking towards the rear balcony.

DOES THE CINEMA TRADE GIVE BRITISH ARCHITECTS A CHANCE?

The Editor of THE ARCHITECTS' JOURNAL *thinks not, and urges their claims. The Editor of* The Bioscope *is not so sure. And so they argue it out between them.*

i: The Indictment

By the Editor of
THE ARCHITECTS' JOURNAL

ANYONE criticizing British architecture of today must recognize that whether good or bad it is enormously unequal. Buildings of an almost idiotic obtuseness of design are jostled by others in which the finest efforts of our race find expression. The selfsame street harbours the best and the worst, and between these extremes lie gradations without name or number. This inequality is found in all types of buildings: whether one considers the public-house or the factory, the mixture of good and bad remains much the same. There is, however, one single exception, and that is the cinema. Among cinemas the gradations of architectural merit are of the smallest compass, and that compass will be found near the bottom of the general scale.

Why is it that, if we were drawing up a list of the two dozen most distinguished examples of modern British architecture, such a list would not include a single cinema? If a visitor from abroad had three days to spare for an inspection of our best post-war work, what would one send him to see? Churches, hospitals, office buildings, shops; a concert and an exhibition hall; a restaurant, a Government building, a block of flats, a number of private dwellings. If he had a week to spare, a London cinema might just possibly be included in his programme. If he had more than a week, a trip to the South Coast to view another might be considered. I believe few things would cause such a visitor greater surprise than the comparative inferiority of our cinemas. If the visitor came from Germany he would be simply staggered; for in that country the unique architectural occasion created by the cinema entertainment has stimulated both the cinema trade and its artistic advisers to give of their very best. My impression is that the British architect travelling in Germany might do worse than place cinemas at the top of his sight-seeing list instead of at the bottom. The German cinema may or may not have earned such a priority in its own country; what is important is that the cinema does, in Germany as in every Continental country whose people patronise the screen in sufficient numbers, stand on an equal footing with other public buildings in quality of design. It is only in England that the cinema has become the Cinderella of architecture, and is seldom or never referred to in serious architectural conversation.

It is impossible to avoid bringing other countries into the discussion of a question such as this. Some might meet my criticism by remarking that it took the Greeks hundreds of years to perfect the temple form; why, they might ask, should we expect the cinema



The booking office of the Skandia Cinema, complete with attendant, recessed in the vestibule wall. The vestibule is the only part of the building to be illuminated by concealed lighting.

SKANDIA : STOCKHOLM

to attain to maturity of expression in a few years? Or they might point to British railway stations, and blame the ugliness and disorder that frighten away so many would-be railway travellers (saving only Lord Ashfield's) on the rawness of our early railway-building efforts. It may indeed be true that it has taken the world half a century of experiments to learn how to lay out and construct a perfect railway station. If the same cannot be said in excuse of our cinema architecture it is because Continental practice has proved most emphatically that it is not true. It is even possible on the Continent to point to a cinema so perfect in its kind and so satisfactory as a work of art that it, together with a school building, sufficed to raise its architect not merely to the highest rank in his profession, but to the position of its acknowledged leader and even to international eminence. I refer, of course, to the Skandia cinema in Stockholm, the work of E. G. Asplund, and the most beautiful cinema in the world.

Among several ways open to elderly gentlemen ambitious to come to the top in a profession, that of being as elderly as possible and continuing to be elderly as long as they can is perhaps the simplest, and is deservedly popular. A young man, however, must advance along different lines. He can only set about to prove in his work that he is capable of a greater degree of intellectual boldness, honesty and endurance than those whom he wishes to lead. That every active mind in the Swedish architectural profession was convinced by the Skandia cinema of Asplund's unique qualities there can be no manner of doubt. Here then is a cinema, which, even now, in the second decade of cinema development, has already become a place of architectural pilgrimage. In the face of such a performance, to talk of the architectural immaturity of the cinema is to talk of something that simply does not exist.

With whom is one to lay the blame for the state of affairs in England? Either the architect or the "exhibitor" (as I believe he is usually called) must be at fault, for these two between them have the matter in their hands. To answer this question we have only to examine what one of these parties can do without the co-operation of the other. The architect, unaided by the exhibitor, has managed somehow to produce such buildings as Liverpool Cathedral, Britannic House, and the new Underground building at St. James's Park. These are acquisitions of which the country may well be proud, and which immeasurably enhance the prestige of the whole architectural profession. And what has the exhibitor shown himself able to do without the architect? For a certain amount of pleasure we are indebted to him, no doubt. He has also given us performances to which, wishing to see a film, we cannot go without running the risk of having to endure a tenth-rate music-hall turn for our pains. He has provided for us that exquisite torture, the cinema organ. He has spent on rising orchestra floors and similar circus stunts the money he has saved on his projection apparatus, regardless of the resulting injury to his patrons' eyes. I am not competent to lengthen this list of the exhibitor's sins, but I have to add what all architects surely consider the crowning horror, which is the horror of outside advertisements.

Now, the architect who designs a cinema façade without remembering that one of the functions of this façade is to carry signs and advertisements deserves to be called a fool. Every architect who knows his job allows for this function in working out his design. But how many English cinema exteriors are allowed to keep their advertisements within the bounds of the most liberal architect's scheme? Sometimes the exhibitor is so completely unable to curb his passion for advertising that he does not even wait till the building is opened and the architect has been seen off the job. Up go his hideous signs, with painted lettering in crimson and Prussian blue, twice the height of the human figure. The windows (cinemas, too, must have windows sometimes) disappear beneath many yards of paper and canvas or vast tangles of illuminated names. The entrances (and even cinemas must have entrances) are blocked by dummy cardboard figures and framed announcements setting forth the attractions of fifty-two coming weeks. There is in the West-End of London a very good building, three or four years old, that was once a theatre. No one passing it at the moment at which I write could mistake it for such any longer. The entire ground-floor masonry is hidden beneath a painting of a tropical jungle, dazzlingly bright. The change from stage to cinema entertainment has thus found immediate expression, and what was once a dignified and attractive piece of architecture now looks like Bank Holiday on Hampstead Heath. The cinema exhibitor everywhere may be known by this: that the moment you give him his head he tries his best

THE SKANDIA CINEMA, STOCKHOLM

E. G. ASPLUND, *Architect.*

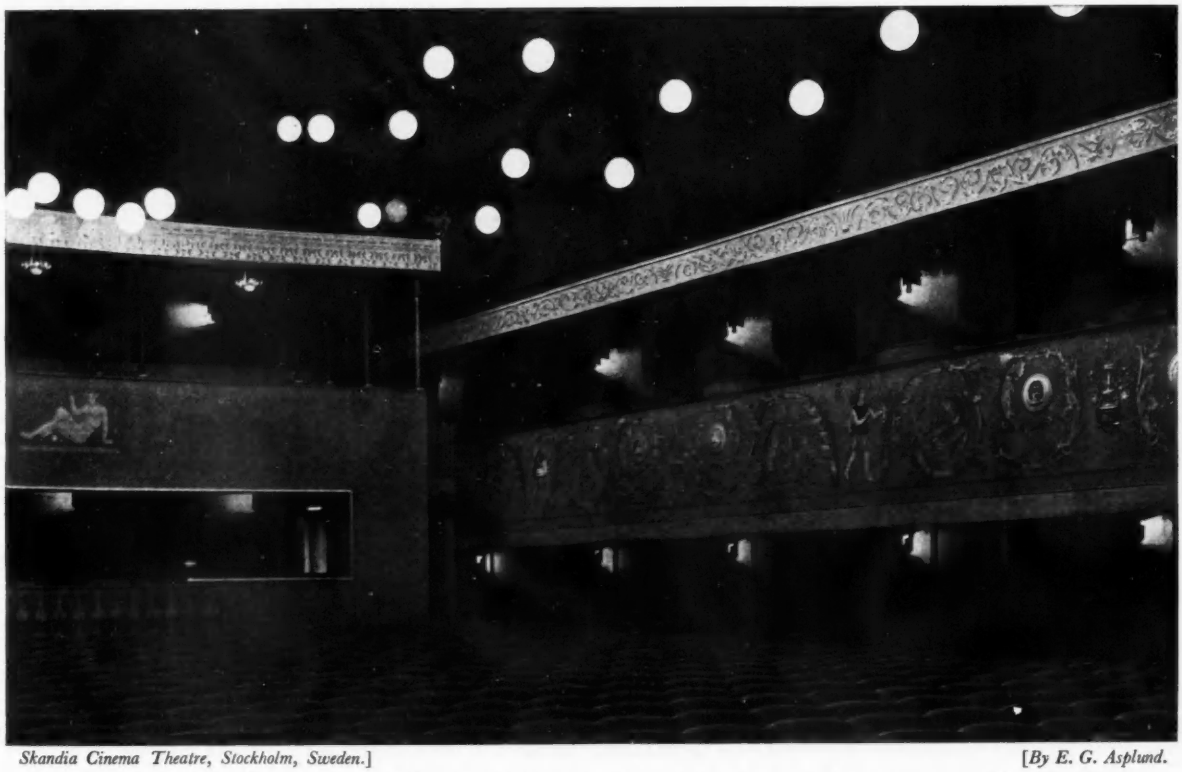
THE Skandia Cinema, Stockholm, of which illustrations appear on the previous page and on those immediately following, is described in the debate between the Editors of THE ARCHITECTS' JOURNAL and *The Bioscope* as "the most beautiful cinema in the world." If (as many think) it deserves this title, it is not so much because it offers a rational solution of the typical problems of cinema design, but rather because it is without exception the most brilliant *tour de force* in poetic architecture for which the cinema has yet provided an excuse.

Surrounded by promenades treated as external courtyards, the auditorium rises like a second building within the building that is the complete theatre. A second surprise awaits one upon entering the auditorium, where, under a black midnight sky illuminated by a cluster of moons, the spectator sees around him not the solid walls through which he came, but a group of scarlet tents, airy structures of embroidered velvet propped on exiguous poles. Or, if he is lucky, he may enter in the middle of the performance, and at the end of the picture see the pale moons slowly appearing in the air above him! The prevailing colours are scarlet and neutral grey, against which is set off the gold of the twin statues and of the decorations. Ineffectual sighting arrangements and unsprung seats are unable to diminish the popularity of this exquisite interior.

SKANDIA : STOCKHOLM



Looking towards the screen. When the curtains are down, the outer pair remain slightly parted by the tension of their cords, and reveal a low balustrade, silhouetted against an inner curtain. Gilt statues, male and female, stand on each side of the screen as if to remind one of the human puppets in the animated shadow-show of the film.



Skandia Cinema Theatre, Stockholm, Sweden.] *[By E. G. Asplund.*

Looking towards the rear balcony, of which an architectural cross-section drawing appears on page 703. Like the side ones, it is faced with scarlet velvet, on which are embroidered designs by Alf. Munthe, carried out in the Thyra Grafström studios, conducted by Miss Elsa Guttberg. The lighting gives the effect of clusters of moons in a night sky.

SKANDIA: STOCKHOLM

to disguise his theatre as a showman's booth, and what he cannot disguise he conceals behind a hoarding. It is as though he were ashamed of being a citizen, and afraid to take a settled place in the ranks of an ordered civic existence.

These complaints are not enumerated here for the purpose of fault-finding. I am simply concerned to argue two things: first, that our cinemas are not good enough, and do justice neither to our architecture nor to the country as a whole; and, secondly, that English architects are capable of producing better cinemas, if only exhibitors can be found who have the wit to get them to do it. I doubt whether there are in Great Britain any architects of real ability who would consider a cinema unworthy of their attention. Such diehards are known to me in several other countries.

Some time ago I wrote to a distinguished American architect asking him whether he knew of any interesting cinema architecture in his country. His answer was somewhat startling. "As to cinematograph buildings," he wrote, "or 'movies' as they are generally called in this benighted country, I am afraid that I can give you no assistance whatever. I loathe the things myself and probably have only seen two or three in the course of my whole life, so that I have no real first-hand information. I only know that there has been an enormous number of such buildings built all over the country, and some of them have been very large and elaborate; but from what I have seen of them published in the magazines they have been crude and ugly to the last degree. I don't think any really good architect has ever built a moving-picture house, except perhaps out on the Pacific Coast, where I think they have had several good ones built." There you have an attitude which does explain many of the things one most dislikes about the cinema. It is indeed questionable whether a job that is disdained by the leaders of our profession can ever be taken seriously by the large majority of us. Fortunately I know of no British architect who holds such an opinion about cinemas. On the contrary, I can recall several first-class men who have talked with enthusiasm about the cinema and its possibilities. None, I am sure, would feel compelled to refuse a cinema job because he had previously designed a town hall or a cathedral. British architects have learnt to take the rough with the smooth, and there are few of them who have not done the humblest sort of work in their time.

The conclusion to which I am driven is that our exhibitors as a body have not yet awakened to the importance of architecture. Good architecture is to an entertainment what silver and linen are to a meal. We do not want to be smothered with architecture any more than we want to be burdened with superfluous knives and forks at table. There are cinemas in which a quantitative excess of architecture tries to make up for a qualitative poverty that is often pitiful. There are others (and these are far more numerous) in which to witness a film is like eating out of a newspaper. Even the wrong sort of architecture is better than no architecture at all. But why not a far larger proportion of the right sort of architecture? The truth is that too many cinemas are built in a manner that makes it impossible to believe that a qualified architect has been employed on them. What is to be expected of a building when proper architectural skill is denied it? How can such a building fail to offend our eyes? Its effect must be all the worse when we consider the vastly complicated requirements of the modern cinema. We hear a good deal nowadays about ugly garages and bungalows, but a cinema has a hundred chances of creating ugliness to every one chance that is offered to the bungalow. That is a very good reason, it seems to me, why its owner should be exactly a hundred times more careful.

And the owner who is careful will not regret it, for he will acquire something of infinite value to himself. The appeal of architecture is a lasting appeal. Fashions in film entertainment change almost from week to week, from programme to programme. The coming of the talkies has made a whole world obsolete; but good architecture never becomes obsolete. Everything else that is put into a cinema is of the nature of temporary device which may have to be scrapped at a moment's notice; when the cost of it must be written off as a loss. Architecture, on the other hand, is a permanent investment, and the owner of a beautiful cinema will have something still to give his patrons when his rivals have left his entertainment hopelessly out of date. How long will British exhibitors hesitate before they follow the example of British bankers, drapers, hotel managers and all the rest, and incidentally of their Continental brethren? How long before they pluck up courage to put a little of their money on the one horse that has never failed yet to finish?

ii: The Rebutment

By the Governing Director of
The Bioscope

If London were run by architects, what would it be like? I picture a city beautiful to the limits of imagination, composed entirely of stately palaces, free from shops and traffic, unsullied by street advertising and other indecent manifestations of vulgar commerce. It would also be devoid of money, business and most forms of human activity. Its inhabitants would sit all day in their chaste homes, devoutly engaged in the sole national occupation: the contemplation of architecture.

That such a London does represent the architect's secret ideal is impressed upon me again by reading the entertaining article, by the Editor of THE ARCHITECTS' JOURNAL, to which I am courteously permitted to reply.

Main counts in the indictment, summarized, are:—

(1) that the architecture of the British cinema trade is worse than that of any other British trade;

(2) that this depravity of taste is peculiarly British, and is not found among Continental exhibitors;

(3) that the exhibitor, besides being depraved, must also be mad, since he immediately obliterates with posters all traces of any architecture with which he has paid (heavily) an architect to provide him;

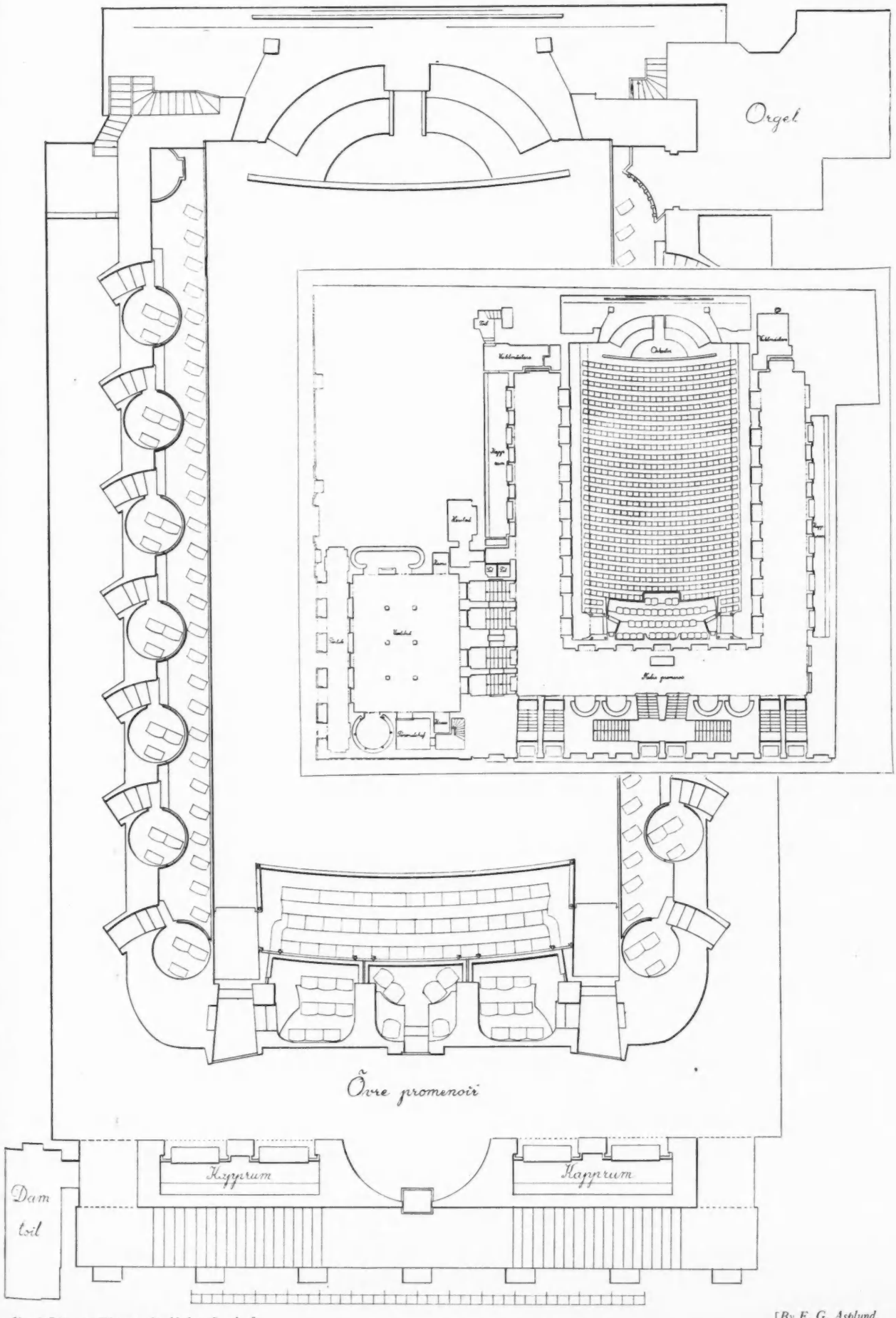
(4) that, if only exhibitors had the wits to get them to do it, architects could produce cinemas which would (I gather) resemble Liverpool Cathedral.

Light comments are also made on the "tortures" which exhibitors provide for customers inside their non-architectural cinemas; but, as these minor items in "the list of the exhibitor's sins" are not germane to the issue, I will merely remark that exhibitors are business men and not Sadists, and that picture-goers seem to enjoy being tortured.

I will reply seriatim:—

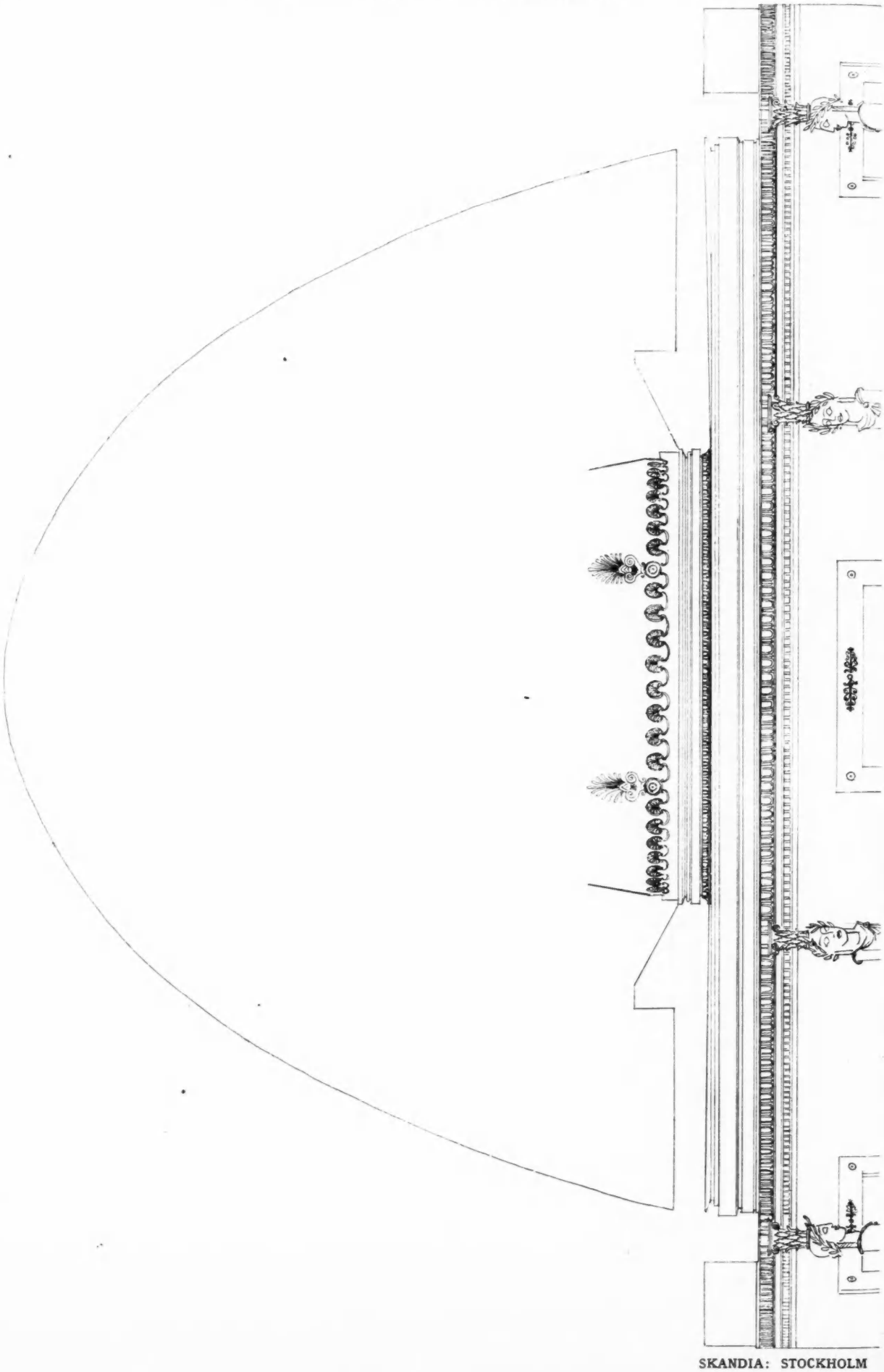
(1) that there may be some who can find æsthetic charm, not only in British public-houses and factories, but in petrol-filling stations, fried-fish shops and multiple dairies (assuredly not to be omitted from a catalogue of shrines of our leading trades); but that, in my opinion, the architecture associated

(*Concluded on page 712*)

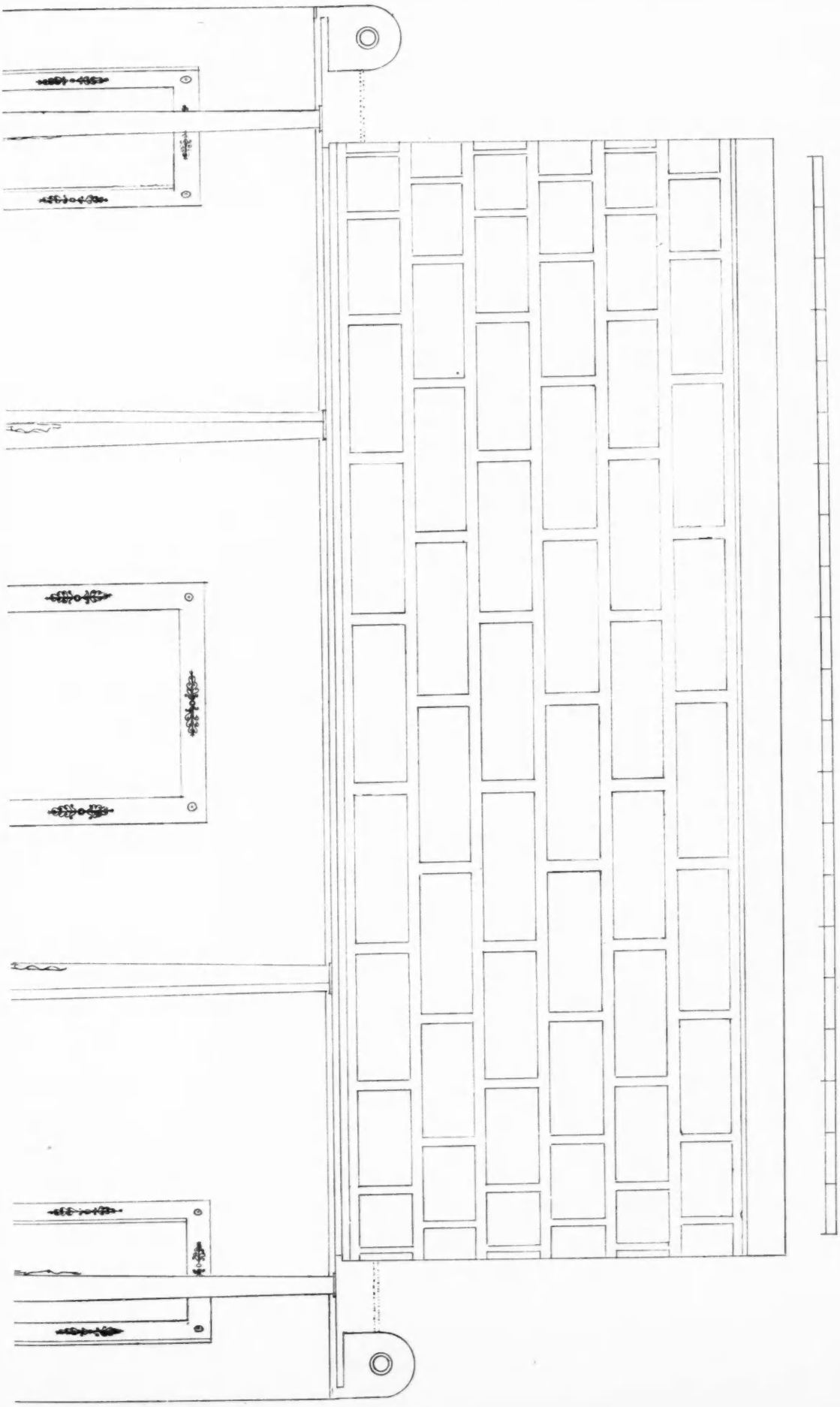


Skandia Cinema Theatre, Stockholm, Sweden. [*By E. G. Asplund.*

SKANDIA : STOCKHOLM *Plans of the first floor, and inset, on a smaller scale, of the stalls.*



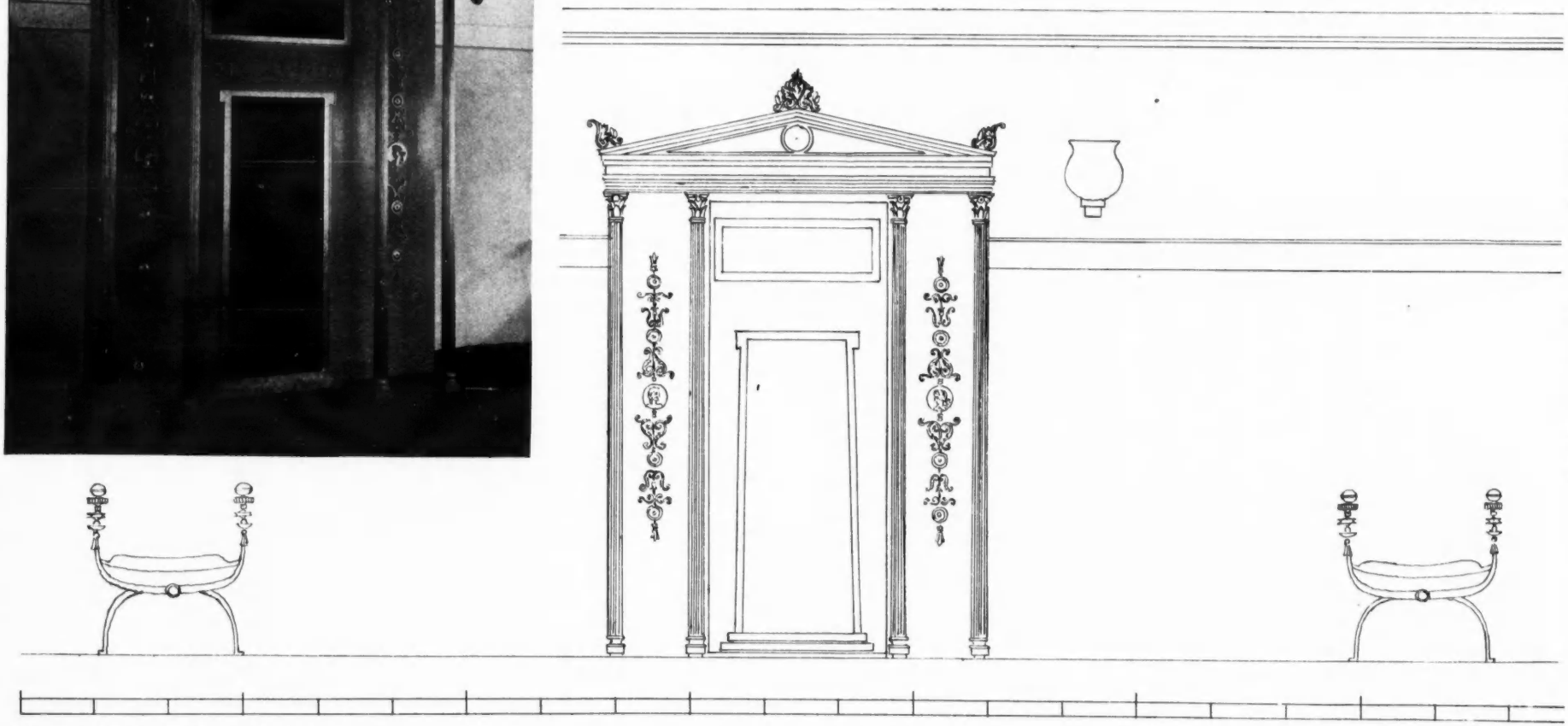
SKANDIA: STOCKHOLM



Skandia Cinema Theatre, Stockholm, Sweden. *The architect's detail drawing of a section of a circular waiting-room.* *[By E. G. Asplund.*

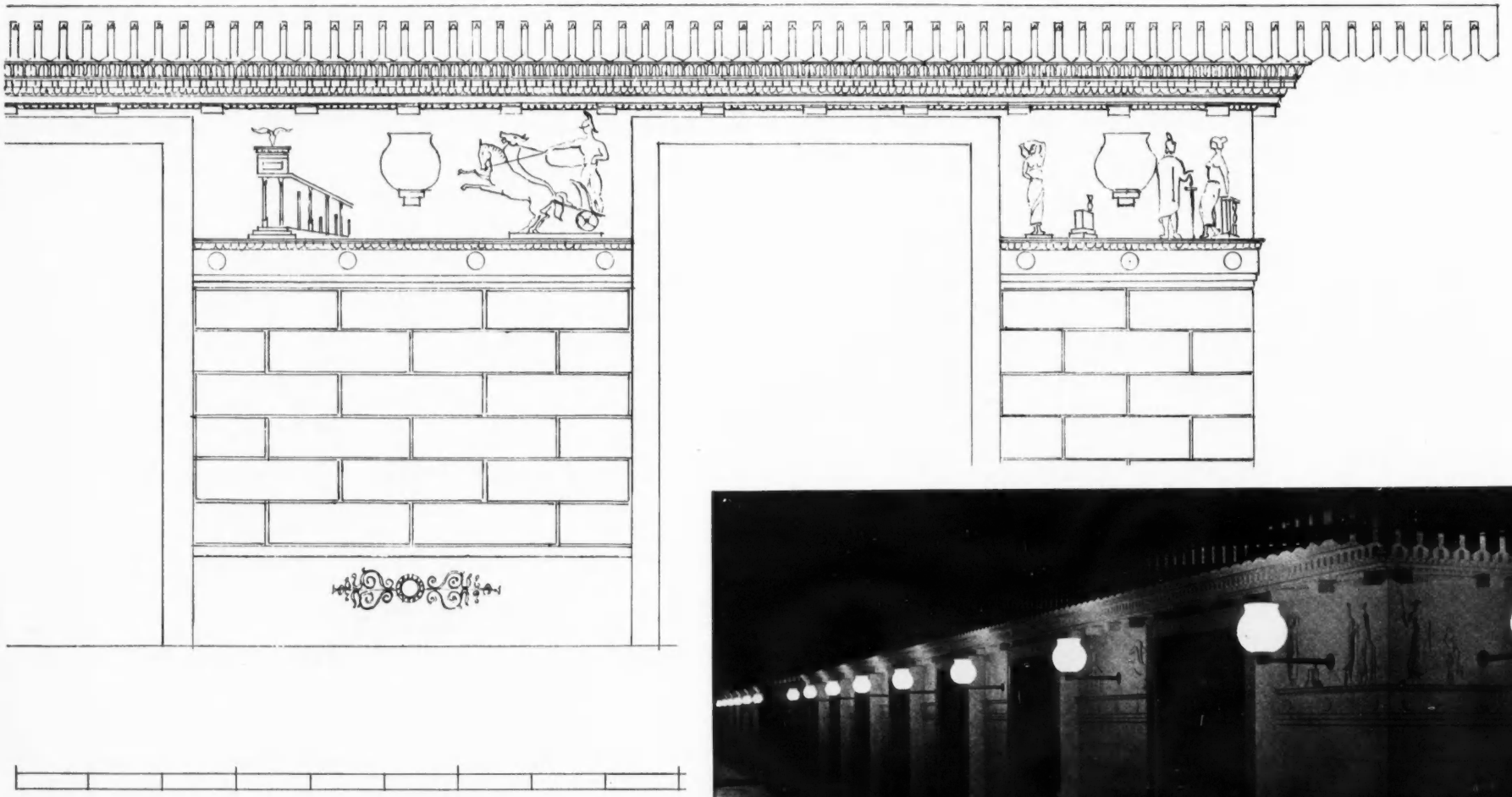
The entrance to the central box in the rear of the auditorium. Each of the boxes is entered by a door which takes the form of an archaic Greek portico in miniature. The bracket lamps are used in both promenades and suggest street-lighting. The stools are of bright armour steel with brass ornaments, and their seats are made of a piece of padded and decorated leather stretched between two steel rods.





Skandia Cinema Theatre, Stockholm, Sweden.]

[*By E. G. Asplund.*





A lateral wing of the ground-floor promenade. The entrance to the stalls are on the right. The exterior façade treatment of the auditorium wall should be specially noted. This is surrounded by a darker-coloured strip in the marble floor, suggesting a sidewalk. A mirror in each end wall gives the impression that the promenade surrounds the auditorium on all four sides.

Skandia Cinema Theatre, Stockholm, Sweden.] [*By E. G. Asplund.*

with these, and a majority of other important British trades, is far inferior to that of British cinemas;

That an English cinema—Mr. Frank Verity's Shepherd's Bush Pavilion—won the street Architectural Award as the finest building erected during the year, as long ago as 1923; and that, since that date, a great many cinemas of even finer architectural character have been erected throughout the country;

(2) that the *average* Continental cinema is some fifteen years behind the average British cinema in beauty, in comfort and in architecture (if any). (To cite the Skandia Cinema, Stockholm, as the type of all Continental cinemas is equivalent to contending that all slaughter-houses must be beautiful because the Colosseum was once a slaughter-house);

(3) that, although architecture is described as a "permanent investment" and films as mere fleeting attractions, it is the films which people pay to see and not the architecture; and that, advertising being essential to the exhibitor's business, the exhibitor could never finance expensive architecture if he were debarred from advertising.

Also, and incidentally, that good cinema posters would prove a pleasing and merciful cloak to some of London's accredited architecture;

(4) that the pride of possessing a cinema which resembled Liverpool Cathedral would fail to recompense the owner for the probable financial consequences of such an enterprise.

In short, that architecture was made for man, not man for architecture; and that the first function of a cinema is to be a comfortable, efficient and economical place of entertainment, rather than a local beauty spot.

Far from being unmindful of the value of good architecture, the cinema trade, I venture to assert, is, at the present time, among the architect's best clients. In *The Bioscope* the other week, we published a list of nearly 150 cinemas planned or in course of erection, and practically all these undertakings will engage the services of professional building designers. Not only does the exhibitor almost invariably employ a qualified architect; he is also far from niggardly in the allocation he is prepared to place at the latter's disposal.

Perhaps the most effective answer to the criticisms arrayed, however, can be found in a comparison between the cinema and the theatre—an obvious analogy which, I observe, has been discreetly overlooked.

I do not fancy that the bitterest cinephobe would deny the patent fact that the modern cinema has inaugurated a new era in the construction of houses of entertainment. Not only structurally, but also in seating, lighting and, indeed, every detail of equipment, the modern cinema has established a standard incomparably higher than that of the "legitimate" theatre. Contrast the discomforts and annoyances of old-fashioned playgoing with the almost sybaritic luxury of modern picture-going.

No architect of my acquaintance would defend the hard benches, the chill draughts and the neck-breaking angles of vision of the hovels of Thespis against the fairy palaces of Princess Cinderella Cinema.

THE TREND OF DESIGN AT HOME

Mr. J. R. Leathart, out of the fullness of his practical experience, traces, not without criticism, current tendencies in Great Britain.

IT has been remarked by some competent critics that the average film is produced to appeal to the mentality of members of the gentler sex of the age of seventeen years. Anything above this intellectual standard is considered "high-brow," and as such is not a "box-office proposition," to quote the jargon of the film trade. It will be a thousand pities if similar criticism is levelled at the cinemas themselves.

The success of a new cinema is too often gauged by the length and fortissimo of the "Ohs!" which are wrenched from a benumbed audience when first the glories of the newly-opened building burst before its eyes. This may be evidence of first-rate commercialism, but it is not an indication of the true architectural merits of the particular design.

With no crystallized public opinion and no definite standard of taste to check the vulgarity of many designs, it is a matter of congratulation that the level of the bulk, low as it is, is not even lower.

It is not altogether to be wondered at that waves of fashion, particularly in interior design, ebb and flow. The nature and purpose of cinema building gives rise to a licence which would not be tolerated in buildings of a more utilitarian purpose. Neo-Grec had a spasm of animation just after the war, followed by a period of nondescript quiescence, until recently an American architect "created"—a delightful word much in use by fashion experts—the "atmospheric" interior, and, following close upon the heels of this innovation, France presented the English architect with acid-engraved glass and Brandt ironwork. Such Heaven-sent gifts were seized upon with avidity, with the result that there is an epidemic of "outside-in" interiors, accompanied by the weirdest electric-light fittings that the wit—or rather the lack of wit—of man can devise.

The possibilities of extremely modern German work are just beginning to dawn in this country, and before long there will be such decorative indigestion in our cinemas as will produce a reaction akin to nausea.

International *exchange* of ideas is a healthy business, but whilst we accept foreign currency in design, there seems to be no corresponding acceptance upon the part of our foreign confrères of our creations.

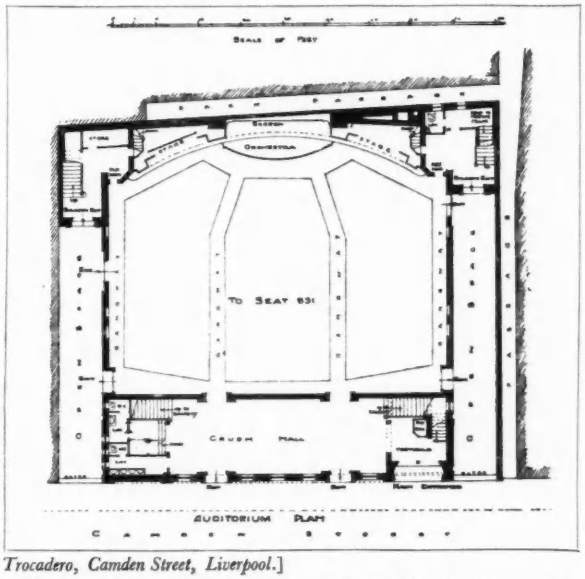
Having in mind that the interior of a cinema need not be viewed except by intention, it differs vitally from the exterior in that the latter is constantly exposed to all who pass by; unless carefully designed, it may be destructive of the amenities of the neighbourhood. It therefore follows that internally more freedom in design may be permissible. At the same time, a general fitness for purpose should be observed even here. It is obviously out of place to counterfeit a Greek or Egyptian temple as a place of public amusement, just as it is equally unsuitable to produce a presentment of a morgue.

Let an example illustrate the extreme difference between outside and interior design. The elevation of Welwyn Cinema (page 714) is treated in a restrained Georgian manner, and the interior is modern in flavour. The

(*Continued on page 718*)

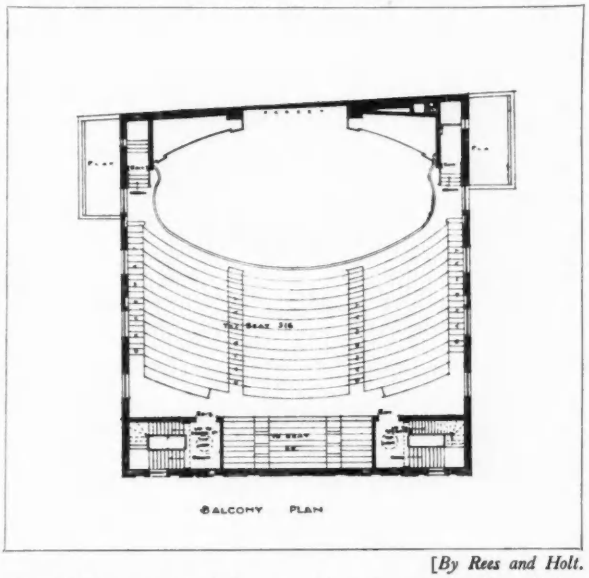


This view, taken from under the balcony, at the rear of the theatre, illustrates a salient constructional feature in the extension of the raked gallery beyond the back wall of the auditorium. A lounge is thus provided at mezzanine level, with a view of the screen and stage. The foyer and staircases are in marble and stone, the remaining walls in French stuc, the ceilings in fibrous plaster.



Trocadero, Camden Street, Liverpool.]

The ground plan discloses a house approaching a square more nearly than the long rectangle of earlier practice, which does not favour the sound-reproduction for which the "talkies" have created a need. Private passage-ways supply ample entrance and exit accommodation.



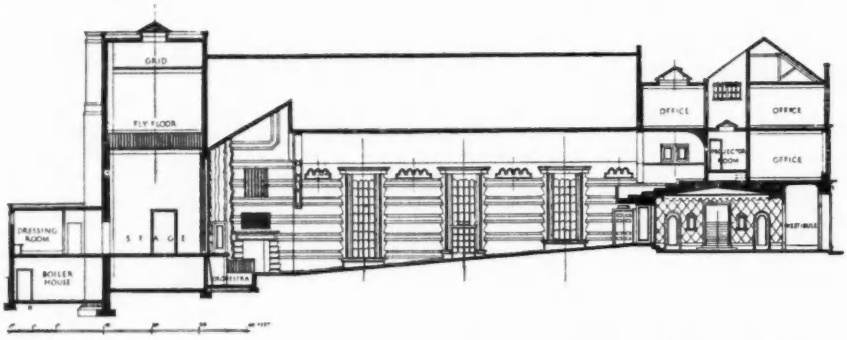
[*By Rees and Holt.*

As will be seen, the balcony occupies a large proportion of the whole area, being stepped back above the crush hall. It contributes 516 seats to a total capacity of 1,347. The building throughout is of fireproof construction. Vacuum cleaning is installed.

TROCADERO : LIVERPOOL

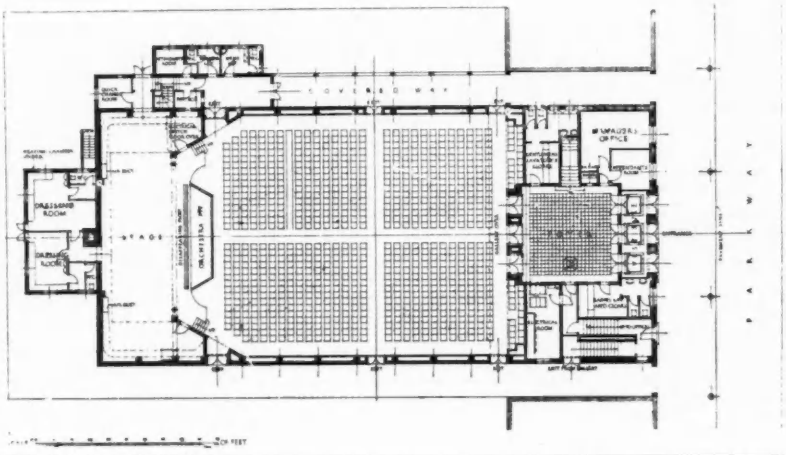


The main façade overlooks Parkway, a broad avenue with twin roads separated by formal gardens. The Georgian treatment of the exterior conforms with a predetermined scheme which embraces the whole of the commercial and shopping areas of Welwyn.



Apart from the balcony and the film projection-box immediately behind it, the majority of the two floors above the foyer and service rooms is devoted to independent suites of offices with windows overlooking Parkway.

The auditorium has been designed for the purposes of a cinema and theatre, and for use on occasion for concerts, lectures and public meetings. Seating is provided for 1,100 persons, of which 930 are accommodated on the main floor, and 170 in a small balcony at the back, reached by means of a stairway from the entrance foyer.



Cinema and Theatre at Welwyn.] *[By Louis de Soissons and A. W. Kenyon.*

The ground-floor plan and longitudinal section. The entrance foyer is entered through three pairs of double swing doors. Facing these, in the wall opposite, are three pairs of folding teak doors, set in deep recesses, which lead direct to the auditorium. It will be easily realized that the deep splay, indicated immediately in front of the proscenium, in the section, throws sound forward.

WELWYN : HERTS



A side wall in the auditorium. Internally the theatre is designed in the most modern manner, which bears no relationship to the Georgian treatment of the exterior. There are acoustical reasons for the form of the walls and ceiling (see also frontispiece).



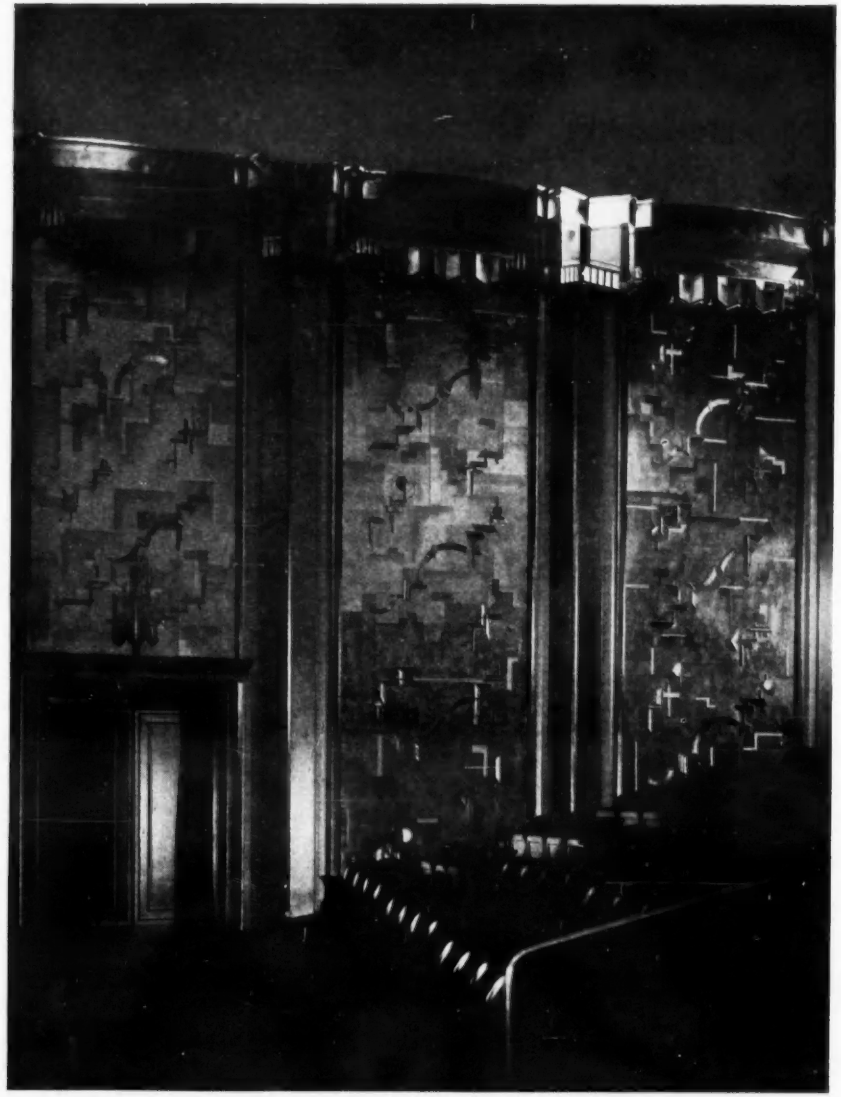
Cinema and Theatre at Welwyn.] *[By Louis de Soissons and A. W. Kenyon.*

The wide, zigzag border framing the proscenium opening has undulating as well as zigzag bands, and colours follow one another in succession from ultramarine, through chocolate, orange, lemon, putty, vandyke brown, grey, and cinnamon, to green-blue. The proscenium is edged at top and sides with chocolate velour hangings; the drop curtain is of copper-coloured heavy plush.

WELWYN: HERTS



A view of the main entrance in the curved façade at the intersection of the Berlinerstrasse and the Kaiserallee, Wilmersdorf, Berlin. This large theatre has particularly spacious accommodation, apart from the actual auditorium, a characteristic of which the external balcony, carried around the front at first-floor level, is an outward and visible sign.



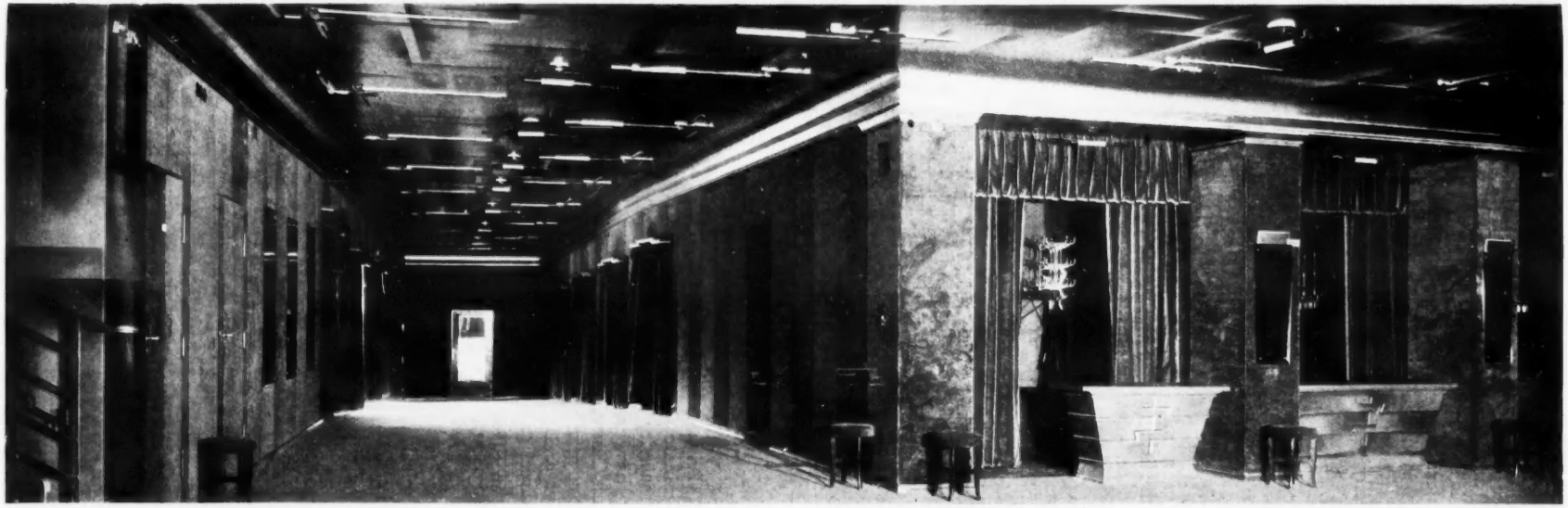
Details of the decorative panels on the side walls of the auditorium, carried out in wood veneer. The repetitive figures probably owe something to the inspiration of the East : as will be seen from the views reproduced on the facing page, they play an important part in the general scheme, being echoed on the front of the balcony and between the concentric ceiling rings.

ATRIUM : BERLIN

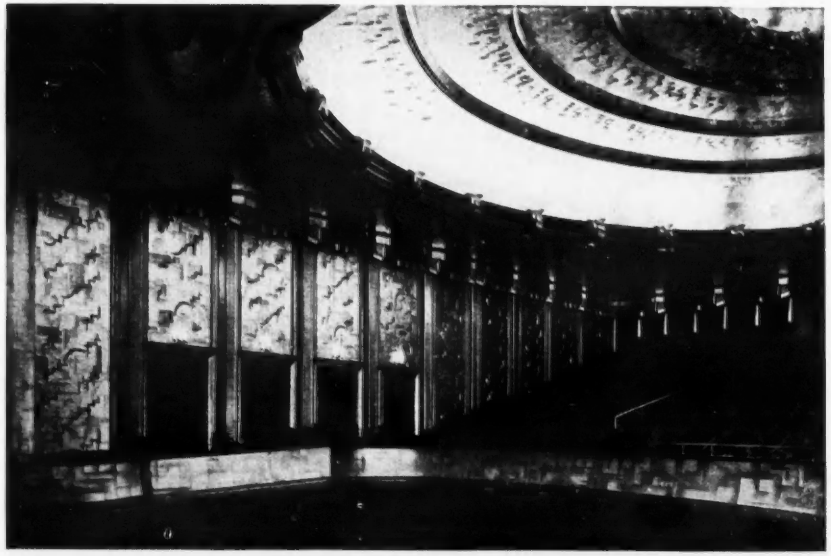


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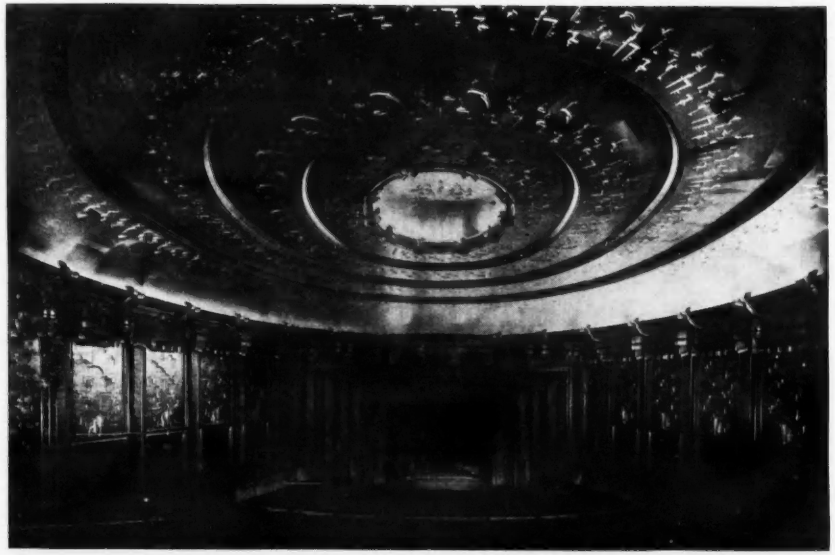


The foyer attached to the parkett, or stalls, provides extensive promenading space. The electrical intricacies of the roof-lighting are displayed with candour.



Atrium Palast, Wilmersdorf, Berlin.]

A portion of the stalls and balcony, as viewed from one side of the stage, illustrating the decorative effect of the panels, shown on a larger scale above.



[By Friedrich Lipp.

This general view of the panelled interior, looking towards the stage, gives a good impression of the large size and oval shape of this end of the house.

interior shape is based on acoustical requirements evolved on scientific lines. But the effect of the design is, I feel, somewhat marred by restlessness engendered by the jagged shapes or lines running through the whole scheme. Particularly is this noticeable in the design of the proscenium opening, and the contrast between the somewhat bleak ceiling and the superabundantly modelled wall surfaces is too sudden. Imaginative and daring as it is, a little restraint might have been more judicious.

A certain playfulness is not out of place, but a disciplined playfulness withal, and it is for this reason that cinema design offers such promising scope to the imaginative architect; it is also one of the instances where he need not be restricted by considerations of traditional architectural forms. Yet, despite this freedom from the cares of formality, too often is the result overborne by the use of the classic orders with their wearisome trimmings and sterility.

It will be found upon examination of the theatre interiors illustrated in this issue that in five examples only—among them, the Imperial Institute Cinema (page 725), the Twickenham Cinema (page 721), and the Queen's Cinema, Forest Gate (page 733)—has the use of the traditional cornice, pilaster, column, and pediment been entirely dispensed with by the designers. Of the remainder, two—the Westgate Picture House, Newcastle-on-Tyne (page 745), and Green's Playhouse, Glasgow (page 761)—are definitely based on one or more of the Roman orders. The rest are inspired by traditional form, but expression is given thereto by the use of the cornice, architrave and coffered panel only, without the adoption of the column itself. The Davis Theatre, Croydon (page 741) is an example of the use of the Corinthian order adapted in the modern French manner; tradition here is still the basis of the design, however.

Unsuitability of purpose in design is exemplified in the Rialto interior (page 763). War trophies are used as the motif of decoration; to my mind their use is more applicable to a War Museum than a place of entertainment.

It is reasonable to assume that as the stage end of the auditorium is the focal point in the interior design, the proscenium end treatment should predominate in the scheme. The side and rear walls should be subservient, and consequently be treated in a subdued manner. Over-elaboration of any part of the interior, other than the proscenium wall, distracts the attention, and neutralizes the effect of any richness which may be attempted thereon. This supposition is so essentially reasonable that it is a matter for surprise that so much care in design is lavished on those parts of the auditorium which are not directly viewed by the audience.

The point of greatest difficulty in design in any balcony-type theatre is the junction of the balcony front with the side walls. The rake of the balcony itself leaves spandrel-shaped wall surfaces which are emphasized by elaboration. The continuation of a main cornice from the front to the back of such an interior, for instance, gives two definite proportions of height to depth, and it will be found in the majority of examples illustrated that the solution of this problem has been shirked. It is not sufficient in good design to allow the problem to control the result; this process must be reversed to ensure success.

Again, there are few designers who care to tackle the problem of the design of a satisfactory proscenium frame. Paradoxically, the most successful treatment is to eliminate the stiff traditional frame altogether. In the Regent Cinema at Bristol (page 739), the proscenium opening, although obviously inspired by its more distinguished namesake at Brighton, discloses an attempt to eliminate the picture-frame effect of the majority of openings. A step further has been attempted at the Twickenham Cinema. In this instance, there is no suggestion of a frame at all. The sides and top of the opening are in three great splayed faces, with the decorative grilles of the organ openings superimposed on the vertical splays. Apart from the essential simplicity of this treatment, the shape is logical and suited to acoustic necessities. Here, too, by the avoidance of traditional form, and by the omission of any panelled wall treatment, a solution of the problem of the junction of the balcony with the side walls has been essayed.

The Regent, Bristol, auditorium, already mentioned, is, of its type, the most pleasing interior illustrated, both for its shape and its detail. The ceiling is graceful, and the decoration and detailing, with its Neo-Grec influence, is well handled. The exterior is treated in a similar manner, and is broad and dignified, without any particular scholarship, however.

Of a different type, but with elaboration carried to the point of wearisomeness, is the Empire, Leicester Square (pages 752-3). Designed in an American office, the attempt by the designers to put all they knew into the scheme is too obvious to comment upon. The front to Leicester Square is a direct adaptation of McKim Mead and White's Library in New York for Pierpoint Morgan.

The Italian feeling of the Empire is also found in the Carlton, Haymarket (pages 734-5). The exterior is noteworthy for the variety in size and shape of the window openings; as a consequence, the design lacks cohesion. Despite this, it has an air of distinction which places it above the average. Internally, the treatment is broad and generally effective.

The Commodore, Hammersmith (page 767) has an interesting front, well balanced, with effectively-placed decoration. The detail is restrained, and despite its stylist insistence it is successful. Internally, however, there is an excess of decorative motif. The sudden break in the side-wall treatment in front and behind the balcony intersection is an example of the problem previously stated being ignored. No solution has been attempted. The arched recesses containing "atmospheric" effects are somewhat unnecessary. The central electrolier is overpowering in scale. The best portion of the interior design is undoubtedly the colonnade treatment at the sides of the balcony.

So much has been written in praise of the Regal, Marble Arch (page 755), and so much more in condemnation thereof, that it seems unnecessary to add to the controversy. But there is one point in the interior which always puzzles the writer. In the great realistic landscape panels flanking the balcony, and just below the lake so charmingly depicted, is an exit door; the feeling persists that, if one were to leave the theatre by this door, one would be drenched through. A lake has no business to flow over an exit door, but this is, of course, the fault of the L.C.C. regulations, and not that of the decorative artist.

If it were possible to have a neatly-framed card, with the one word "Restraint" printed thereon in Roman letters, and if it were possible to have this card hung in all theatre architects' offices in a prominent position, it might, at times, serve to check the prevailing tendency to over-elaboration in modern British cinema design.



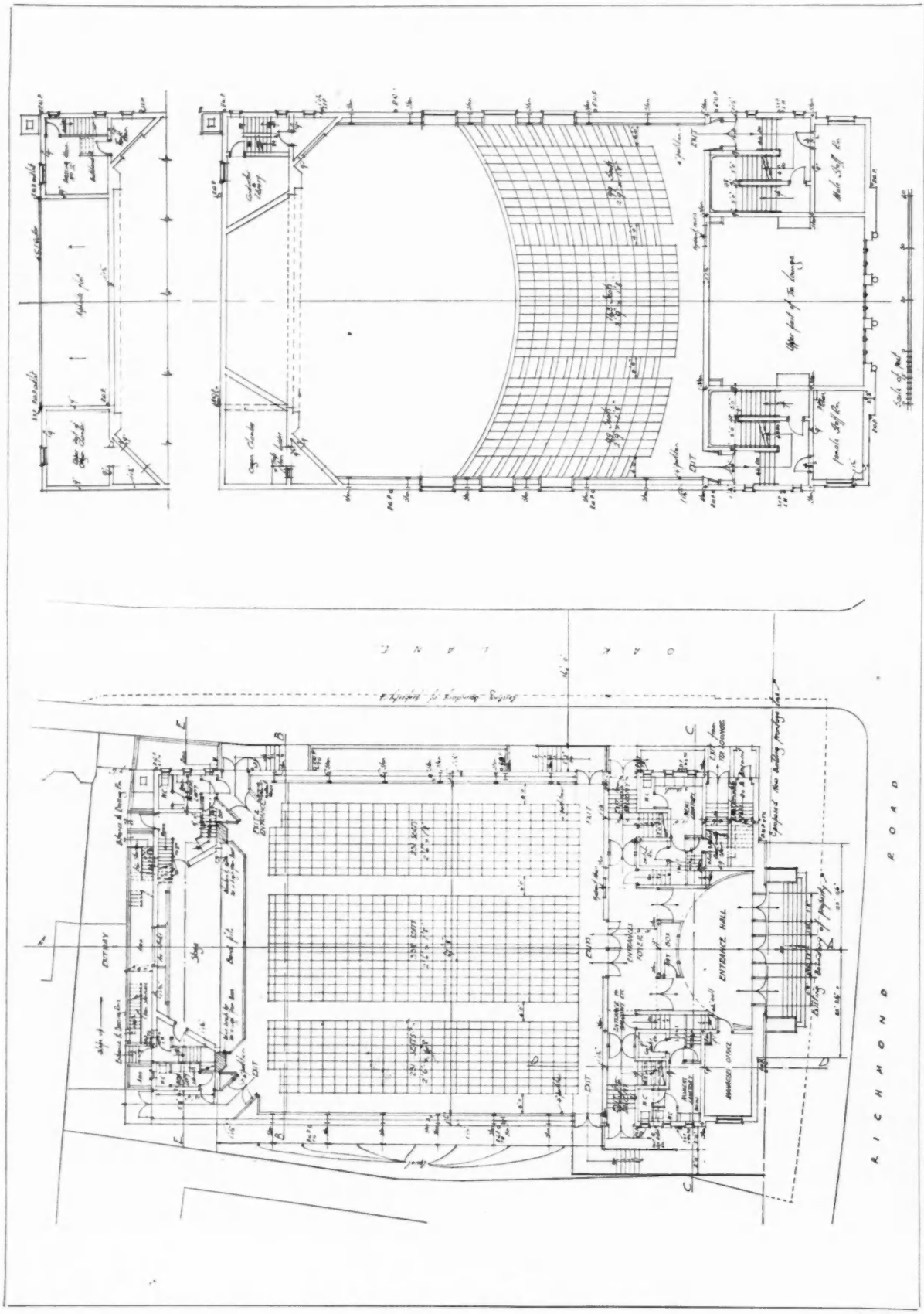
Cinema in Richmond Road, Twickenham.] *[By Leathart and Granger.*

The main entrance, of which the salient features are the three arched window openings and the cornice, which is in coloured faience on a white ground. The walls are covered with cream-coloured Portland cement stucco.

THE three large arched windows on the principal front light the tea-room above the entrance hall, which accommodates 200 persons. Each window has a decorative grille picked out in red, blue, white and bronze, and beneath is a canopy treated in colours of bronze and azure blue. The soffit of the canopy has a sun-ray treatment in radiating bronze ribs on a rich blue ground.

The whole of the walls are covered with Portland cement stucco, coloured in cream, the lower portions being treated in buffs and greys, and the lowest member of the plinth in black. The main doors are in lacquer red and bronze. The cornice is in glazed faience ware in two colours, red and blue, on a white ground, and the recessed wings of the main front, which provide space for posters, have a roof of green-glazed Roman tiles. The roof of the main building is covered with asphalt.

TWICKENHAM

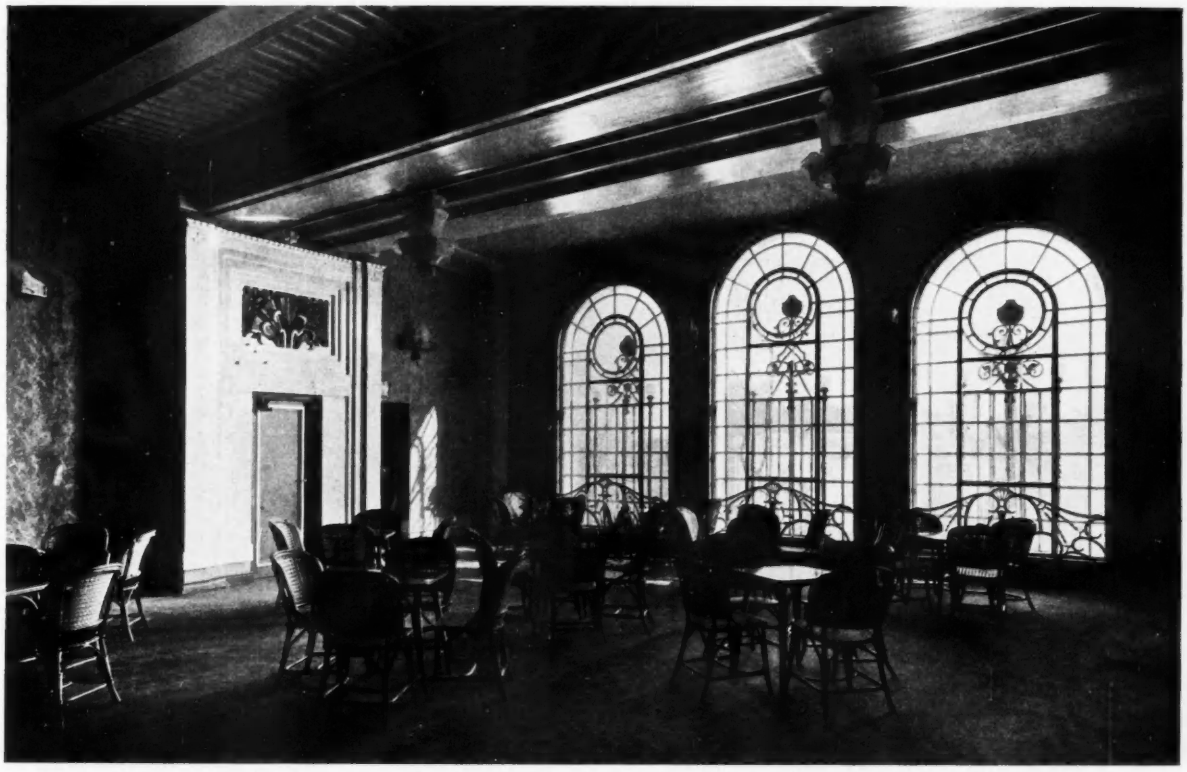


[By Leathart & Granger.

Cinema in Richmond Road, Twickenham.

The architects' plans of the auditorium floor (left) and the balcony floor (right; with plan at stage roof level above). The cinema accommodates 1,141 patrons, 800 on the floor of the auditorium, and the remainder in the balcony. The main entrance is from Richmond Road, but a side entrance in Oak Lane gives access to the cheaper seats.

TWICKENHAM



The tea-lounge, on the first floor, has a dove-grey carpet, with lilac walls and a jade-green ceiling. The panel over the doorway on the left is in bright primary hues. The windows are those seen in the front elevation illustrated on page 719.



Cinema in Richmond Road, Twickenham.] *[By Leathart and Granger.*

The interior of the house, looking towards the proscenium, in the design of which the columns, cornice and pediment of tradition have been dispensed with. The stage curtains are in dove-grey velour, with rich satin appliqué in orange and green.

TWICKENHAM

The architects' plans of the auditorium floor (left) and the balcony floor (right; with plan at stage roof level above). The cinema accommodates 1,141 patrons, 800 on the floor of the auditorium, and the remainder in the balcony. The main entrance is from Richmond Road, but a side entrance in Oak Lane gives access to the cheaper seats.



In the vestibule, the conflicting patterns of the carpets are responsible for importing some sensation of restlessness into the composition. The interior as a whole expresses a note of tropical opulence, to which the palms, of course, contribute. Considered architecturally, the units—doors, fanlights and other openings—have no very close relationship, though some of the details are full of interest. The metal balcony balustrades and grilles, for instance, proceed in a series of surprises.



The façade, although ornate, has the special merit that it has been admirably joined on to those on either side of it. Both cornice and balcony lines are preserved, and the building, while differentiating itself from the terraces with which it is associated, yet enters into an agreeable relationship with them. This is a very clever design in the traditio[illegible]anner and correctly expresses the entertai[illegible]



The tea-room is a glittering apartment, in which modern resources in decoration are exploited to the full. The composition will repay careful examination. It will be observed that the height of the doors corresponds to that of a dado round the room. On the other hand, the tall vertical panels enclosing a segmental bay give extraordinary emphasis to the position of its miniature gallery. And it seems curious that the series of [illegible]e Egyptian motifs should take no account of their tops.



Paramount, Paris.]

The foyer has several features of interest, and expresses some of the conventions of "modernism." For instance, the pilasters on either side of the staircase entrance have capitals which are almost invisible, while they are surmounted by a transom which sweeps past them unconcernedly. The room as a whole presents an aspect of comfort.

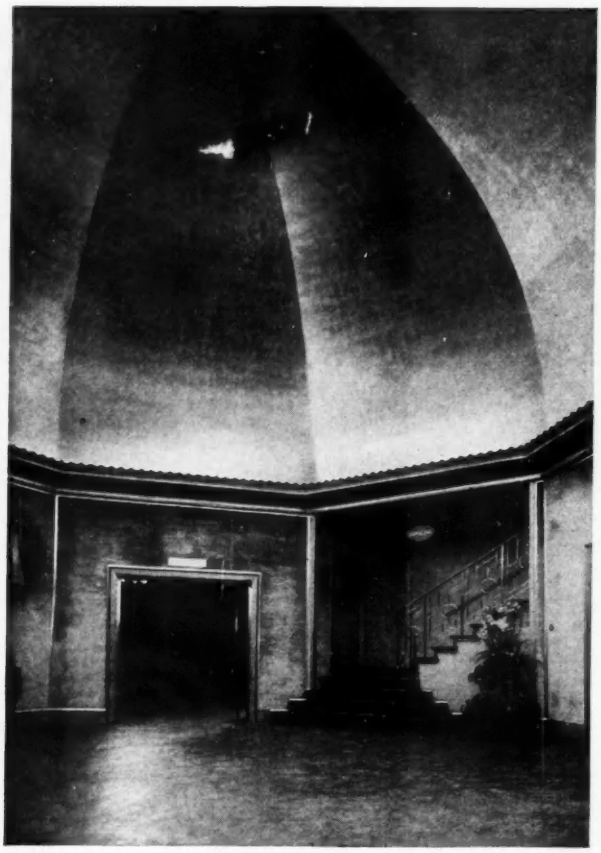


[Frank T. Verity and Auguste Bluysen : Associated Architects.

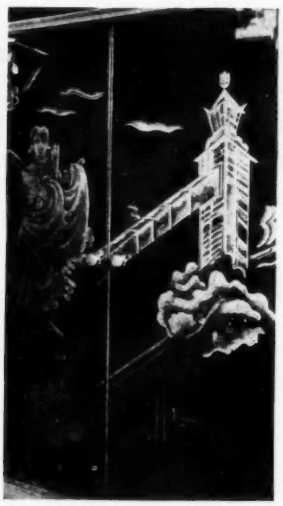
The proscenium arch has undoubtedly sufficient formal emphasis to mark the position of the screen, though the very heavy curved and moulded projection from the ceiling is a counter-attraction which may produce, for some, an effect of duality of interest. The very effective proscenium lighting scheme, however, tends to neutralize this tendency.



One of the candelabra light brackets on the auditorium walls, seen at close quarters. These sconces occur at intervals, in alternation with a repeated decorative jutting ornament, in four equidistant tiers of moulding, surrounding the interior of the house, and broken only by the proscenium, with its formal frame for the stage and screen itself. "Rothe Mühle" remains a mere name: there is nothing even remotely to suggest the idea of the "Moulin Rouge" ("Red Mill"), the Parisian original from which it is borrowed.



A corner of the foyer, showing the domed ceiling, which is illuminated by reflected light. The central doorway is to the cloakroom; the stairway to the right leads to the auditorium.



A photograph of one of the pairs of folding doors in the auditorium, taken to show the lacquered design, carried out in quasi-Oriental style. With the suggestion of an ancient and foreign art, the employment of very Western door knobs, and still more Western automatic silent door-closing apparatus, contrasts strangely. It is not only in this country that instances may be perceived of the anachronous spirit in which the interior decoration of cinema theatres is gaily undertaken. Unity of idea is, in fact, the more precious on account of its rarity.



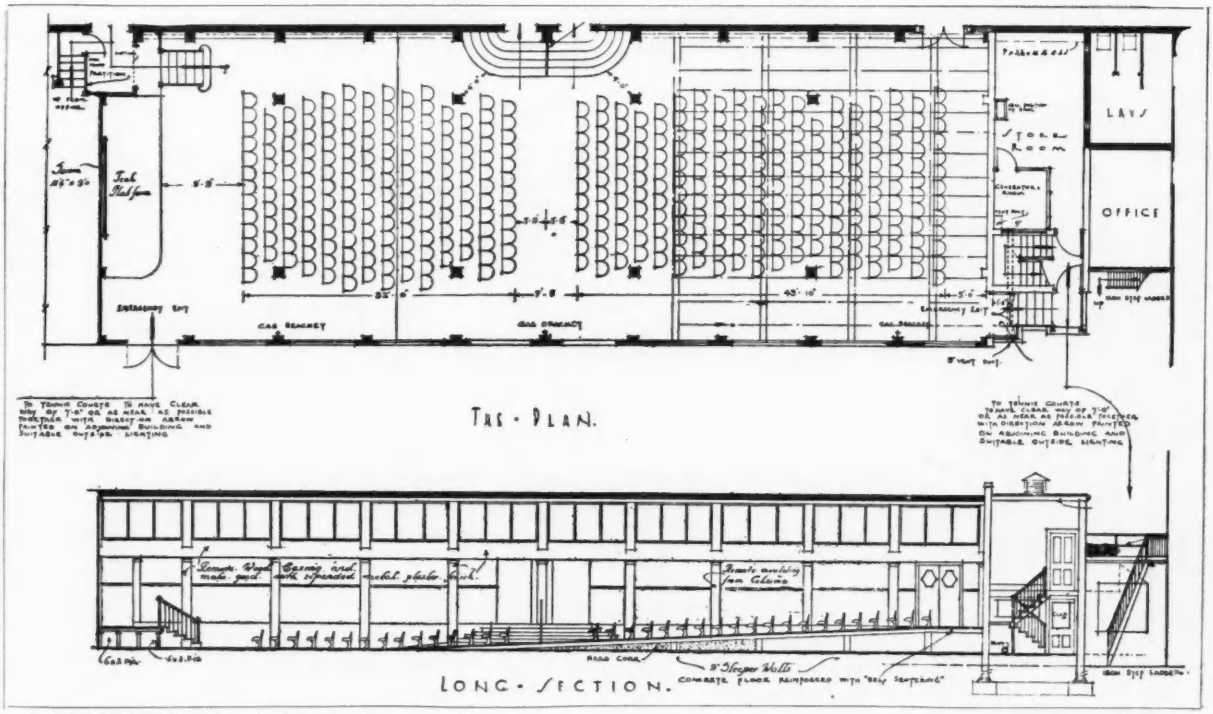
Rothe Muhle, Halensee, Berlin.] [*By Fritz Wilms.*

The view towards the stage from the back of the house. The motif of parallel lines of moulding running horizontally around the auditorium, with light brackets at intervals, might well have been suggested by unconcealed electric wiring. A portion of one of the sets of double doors seen in the right wall is illustrated, on a larger scale, above.

ROTHE MÜHLE: BERLIN



The shape of this cinema was dictated. The screen, seating and other facilities were fitted into an existing room. Bare iron columns have been encased in square piers; uncompromising hot-water pipes have been concealed behind a honeycomb frieze; glass skylight windows have been obscured and painted over; and lighting lanterns of original design have been added.



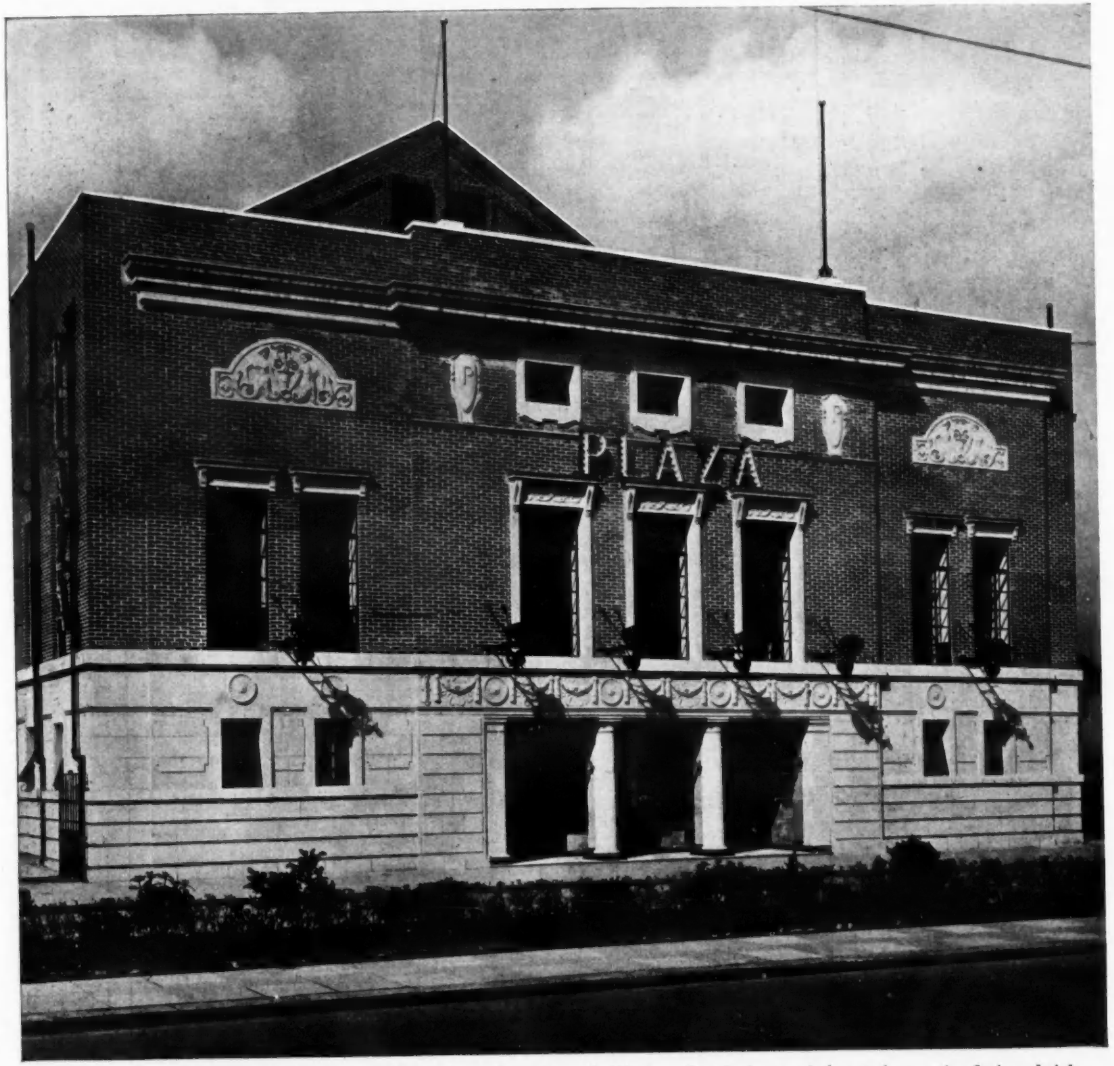
Imperial Institute Cinema, South Kensington.] [*By Easton and Robertson.*

The architects' plan and longitudinal section. The chief entrance, occurring in the middle of one side, has been given significance by means of a flight of shallow steps and a hood. The prevailing tone of the interior decorative scheme is blue-grey, picked out with red. The cost of conversion, like the yearly upkeep, is a charge upon the Empire Marketing Board.

IMPERIAL INSTITUTE: LONDON

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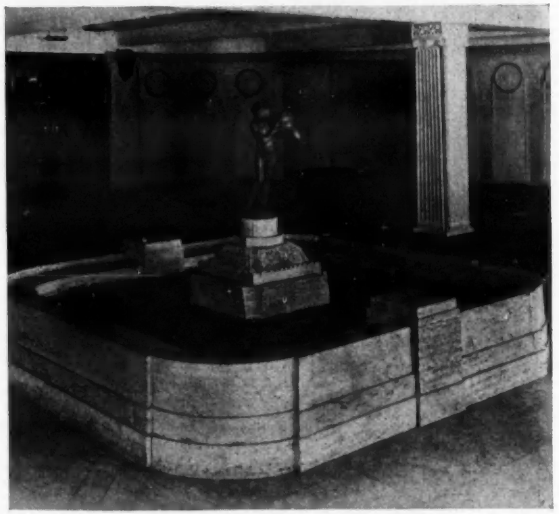
PLAZA : LIVERPOOL



This cinema, fronting on to the new wide boulevard section of Allerton Road, is carried out in rustic facing bricks, with cast Portland stone features. The main entrance gives on to a large foyer, with café, generator room and projection-box over. Behind is the auditorium itself, divided into two floors, with retiring rooms, etc., at the rear of the stage. Adjacent to the café is a nursery, with a nurse in attendance, charged with the custody of patrons' children.



The café over the entrance foyer is decorated in shades of cream and gold. The carpet and the chair seats are blue.



The fountain in the centre of the entrance foyer is, like the pavement, in travertino. The basin itself is lined with blue mosaic and supports the pedestal of a statuette.



Plaza, Allerton Road, Liverpool.]

Details of the balcony dado, which is carried out in botticino marble, include enriched capitols, concealed within which are orange flood-lights which illuminate the ceiling when desired.



[By A. Ernest Shennan.

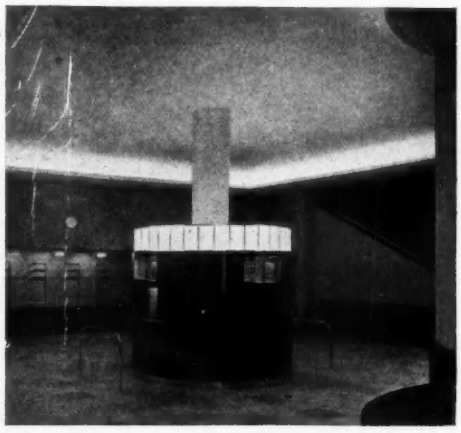
The ceiling of the auditorium is an elliptical vault, coloured deep sky-blue at the crown, shading off and changing to orange sunrise tints at the springing; the scheme is continued in the golden marble of the walls, the old gold of the seating, and the deep orange of the carpet. The electric light fittings are of the French glass panel type. Seating accommodation is provided for just under 1,500. The organ grille has been placed over the proscenium, which is coming to be recognized as the ideal position for it.



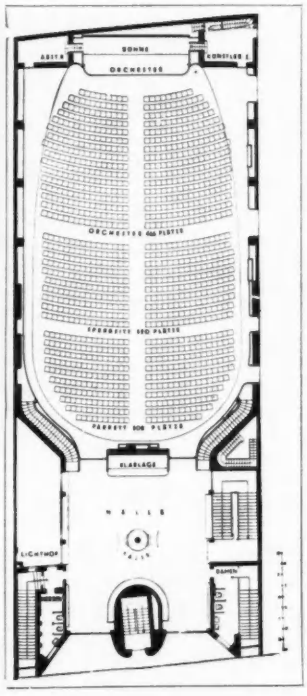
The cinema itself occupies only a comparatively modest portion of this vast building, of which the ground-floor, on the sides illustrated, is given over to a one-price store, the German equivalent of the Woolworth idea. The cinema front is seen on the left.



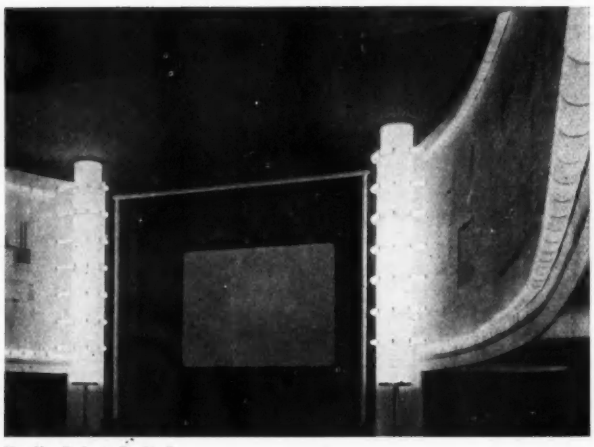
The front entrance of the cinema, by night, showing the illuminated signs.



The pay-box in the entrance-hall; concealed lighting is pressed into decorative service here and throughout. In common with several other German cinemas illustrated in this number, this hall presents, in its bare severity, an extreme contrast with the opulence which is the prevailing vogue in this country.

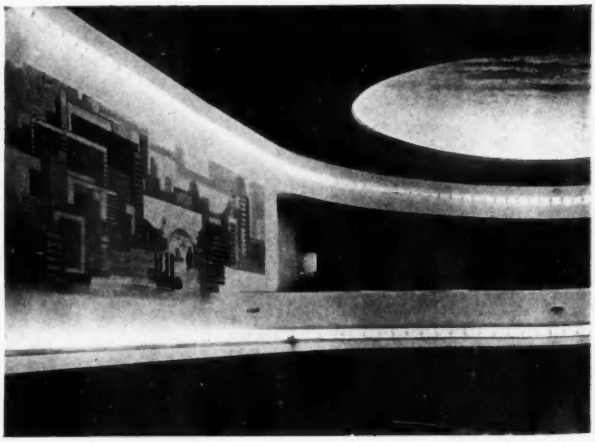


The ground-floor provides seating in three blocks for over one thousand spectators.



Emelka Palast, Berlin.]

Looking towards the stage. The important part played in the decorative scheme by the concealed lighting is here further illustrated.



[By Karl Schneider.

Looking into the body of the house from the stage. Both side walls bear fantastically conventionalized pictures of buildings, ships, etc.

EMELKA : BERLIN

AS TO ACCOMMODATION-

Mr. Robert Cromie, architect of the Davis Theatre, Croydon, touches with authority upon some essentials of an up-to-date cinema.

THE site required for a modern cinema is the first important factor to be considered. Until recently a rectangular piece of land of moderate frontage, and a total depth of three to three and a-half times its width—say, 60 ft. by 200 ft. —was suitable for a house of average size, such as would be required in a suburb or provincial town. This would have a balcony, and seat about 1,500. But the general development of the cinema has led to the natural expansion of its accessories, and larger seating capacity is required to enable the house to bear its increased overhead expenses.

SHAPE AND SIZE

Today the advent of the speech-film is definitely bringing about a return towards the shape of the old-fashioned theatre, inasmuch as a squarer auditorium is desirable, so that every person in it shall hear with equal facility. Acoustic perfection is not dependent upon the width of an auditorium; but as sound emitted at the stage end is absorbed by the

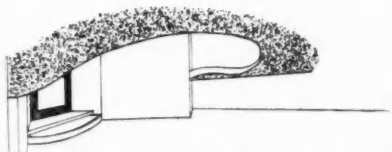


FIG. 1. Top of screen cut off from view of rear side seats of Stalls

clothing of the people over which it passes, those seated at the rear of a long hall fail to hear as clearly as those in front; that is, unless the amplification is unduly strengthened. In other words, correct acoustics at the rear of the stalls would imply excessive loudness in front; and over-amplification invariably means syllabic distortion. It is interesting to note how logical mechanical requirements thus affect architectural design.

Originally it was easy enough to arrange perfect sight-lines in a longitudinal hall: nowadays one must plan for perfect hearing as well. The impossible perfection would be for every seat to be placed about the same distance from the focal point. The practical plan is to design a hall in which all the holders of better seats hear perfectly, and the remainder as well as possible. Hence we revert to a shape much wider than was hitherto necessary. This, again, demands a wider frontage and a more expensive building. Hence, once more, the theatre must be still further increased in capacity to pay for it.

It is generally conceded that a comfortable size for an ordinary first-class cinema would be of about 2,000 to 3,000 seats. Examination of the plans of recently erected "supers" shows a tendency to expand the arena to a width of 100 to 120 ft. and equivalent depth—i.e. measured from curtain line to the rear wall of the stalls. Given a suitable ceiling, there is no reason why the balcony should not extend backwards over the rear stalls wall, its front line depending upon the sight-line from the stalls barrier. This method produces a very satisfactory section, allowing, as it does, a pleasantly short ceiling —or balcony soffit—over the rear of the arena, which is conveniently good for acoustics, sight-line, and ventilation, and also relieves the sense of depression inevitable in a theatre where the balcony overhang is excessive, as in a famous London theatre (figure one).

SIGHT-LINES

Dealing first of all with sight-lines, the generally accepted slope or rake of the arena floor is one in ten. The first few rows of seats can be level. The floor must always be dished, for the seats must be placed radially to a centre; and if the floor is not dished the end seat of a row would be lower than the middle seat in the same row.

The balcony front should be struck from the same centre, or with a longer radius—never shorter, otherwise one would make the common fault of the old horse-shoe plan in which the sight from the rear side stalls is cut off at the top corner, and there is danger of the ends of the stage front being cut off from the view of the rear side seats of the balcony—a dreadful defect (figure two).

The sight-line from the rear of the stalls on centre line should show well

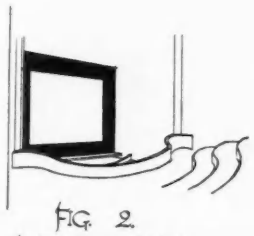
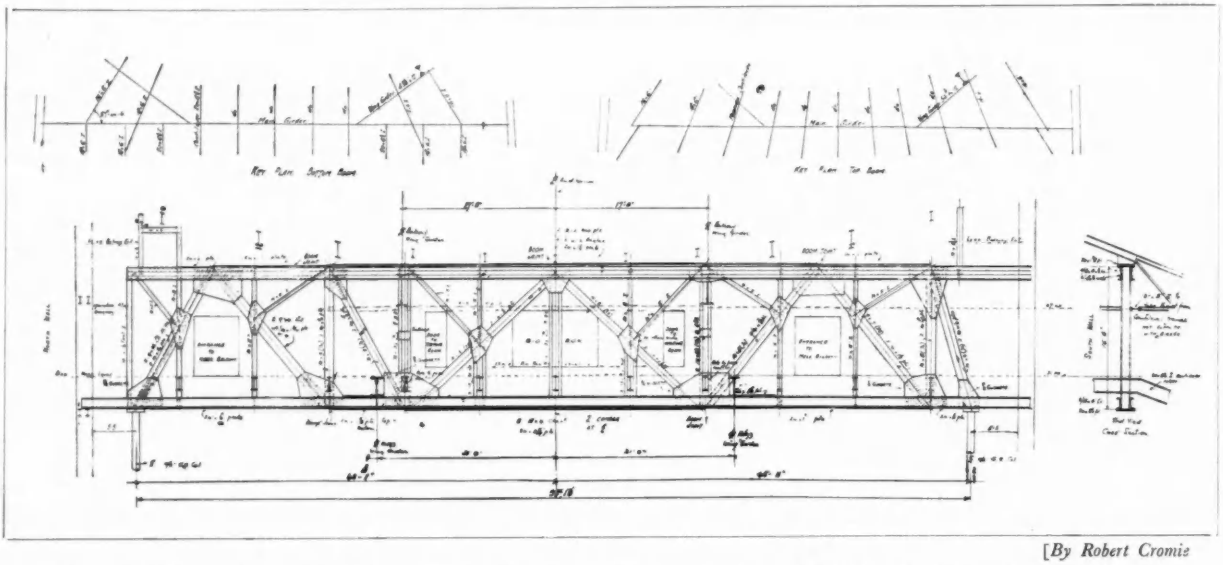


FIG. 2. End of Stage & Orchestra cut off from view of rear side seats in Balcony.

above the screen. Curtain line is the stage face of the proscenium wall, and is used as a datum for all longitudinal horizontal measurements. Centre line is the axis bisecting the proscenium and the rear width of the stalls; while datum is the finished level of entrance hall (or other convenient fixed level) and is used for all vertical measurements, all steps (6-in. risers) being noted as so many plus or minus datum. It is usually assumed that the eyes of a short person, sitting normally, are about 3 ft. 6 ins. above floor level. All sight-lines should give a good view of the orchestra.

For general up-to-date purposes every cinema must have full stage accommodation; hence the screen can usually be set back ten feet or more from curtain line. The L.C.C. rule for fixing the position of the front row of seats allows an angle of 35° from the top of the screen to 3 ft. 6 ins. above floor level. The screen position should be calculated for sight-line purposes on curtain line.

I have been asked: "What angle do you make your balconies?" or, again, and very often: "What height do you make your balcony steppings?" To reply that I do not make the balcony any particular angle, and never know what the steppings will be until the section is drawn, is received with incredulity. But, surely, it should be obvious that the angle of the balcony depends geometrically upon the sight-line; and if this is drawn from the topmost step to the bottom of the orchestra rail, all will be well. The height of the balcony steppings, then, depends



[*By Robert Cromie*

The main balcony girder of the Davis Theatre, Croydon, which is over sixteen feet deep, has apertures formed in it to allow of the planning of "vomitories" for the rapid exit of the audience—an arrangement often necessitated in large theatres. Other illustrations of this cinema theatre appear on page 740.

upon the back-to-back widths of the rows. Everyone seems attracted by a very shallow balcony rake, but an easy sight-line is far more important. Obviously an unduly steep balcony is a horror to be avoided. It is only created by overcrowding a site. The L.C.C. regulation maximum is 35°.

VOMITORIES

In large balconies the necessity for arranging easy access to the seats, and ready means of exit, developed the tunnel or "vomitory." The wider the theatre, the more necessary vomitories become, so as to avoid a great press of people surging towards the side walls, where the exits are placed. The remedy is to short-circuit the crowd; and this is done by cutting tunnels through the steppings. To minimize the unavoidable loss of seats, short flights of steps are planned in each tunnel. These in turn lead to exit corridors at the various levels, and thence direct to the street.

Connecting corridors from the foyer (which is normally created by the void under the balcony) form an excellent means of entry to the balcony, and enhance the facility with which the incomers can be distributed. A large balcony may have seats of three values, and the theatre architect must exercise ingenuity in planning, so as to avoid crossing incoming streams or congestion. The arrangement of vomitories often necessitates apertures through the main balcony girder, which is usually of special design, with great depth, and often of lattice construction. The main girder of the Davis Theatre, Croydon, is 16 ft. 6 ins. deep.

The vomitory is a corollary to the cross-over or wide transverse gangway dividing a balcony into upper and lower levels. This method of "breaking" a balcony is eminently applicable in smaller halls, where the first few rows can be allotted the highest-priced seats, with direct access to the tea-room. An arrangement that is essentially bad is a cross-over on the bottom stepping, tending, as it does, to cause a rush downwards in case of panic.

Stalls-level vomitories are rare; but I recently obtained L.C.C. sanction to a scheme where this arrangement met with commendation. In an exceptionally wide arena there is a great mass of people in the centre of the stalls pushing towards the outer gangways.

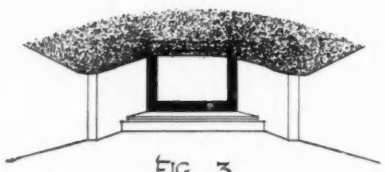


FIG. 3.
COMMON FAULT:—Top of Screen cut off from view of persons standing at Rear of Stalls

To relieve this, a tunnel 10 ft. wide was dropped through the floor of the centre cross-over to an underground passage leading direct to the street.

In densely populated neighbourhoods where there is a heavy Saturday-night trade, it is advisable to provide standing room at each side, as well as at the rear, of the stalls. This should be raised, and must be cut off from the side gangways with balustrading. Nothing appeals to the manager so much as the fact that people take up less room standing than when sitting! (See, in this connection, figure three.)

ENTRANCE HALLS AND PAY-BOXES

There is probably more discussion between architect and client over the disposition of the entrance hall than over any other part of the plan. Some favour a small vestibule — a mere cashing-in space—with a large foyer beyond it. This causes outside queueing, which is *not* regarded favourably by local authorities. In America the "pavement" type of box-office is popular (there is one at the Empire), but it is not generally liked in this country. The practical objections to placing the pay-office inside the building—viz. at the far end of a large waiting-room—make such a plan inadmissible. The principal need is to arrange the pay-office so as to avoid crossing queues, and at the same time to minimize duplication of cashiers, attendants, pages, etc.

A ground-floor office for the manager should be provided in close proximity to—if not adjoining—the principal pay-office. In smaller halls a separate entrance to the cheap front seats is very desirable. Movable pay-desks are often an advantage.

STAGE NEEDS

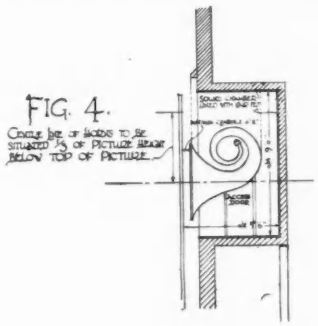
In view of the popularity of "cine-variety," the setting of prologues,

orchestral turns, etc., every cinema must have some sort of stage. Even when a policy of 100 per cent. talkies is adopted, provision should be made for ordinary entertainment, and the fullest possible width should be given to the proscenium opening. The future of the picture-screen is an unknown quantity, but there are very definite signs that it will be increased in width in the near future. The panoramic screen has already been tried out with considerable success, and, where space permits, the stage end of the theatre should not be cramped.

FOR THE TALKIES

Provision for talkies is essential. The requirements are: (1) a space of about 6 ft. 6 ins. at the rear of the screen; (2) bioscope box of sufficient width for three machines and two spots, as well as (3) battery-room of, say, 70 ft. super, 7 ft. in height and separately ventilated; (4) room for the non-synchronous apparatus, with a view of the screen, and situated near the bio-chamber; (5) room for the generator.

In the case of an existing cinema, where there is virtually no space at the back of the screen, a sound-box can usually be built out on supports, as shown in figure four. In some systems the amplifying horns are placed on the stage at each side of the screen and do not require any space behind it. The difficulty of installing speech-film apparatus in an old cinema is usually the lack of space



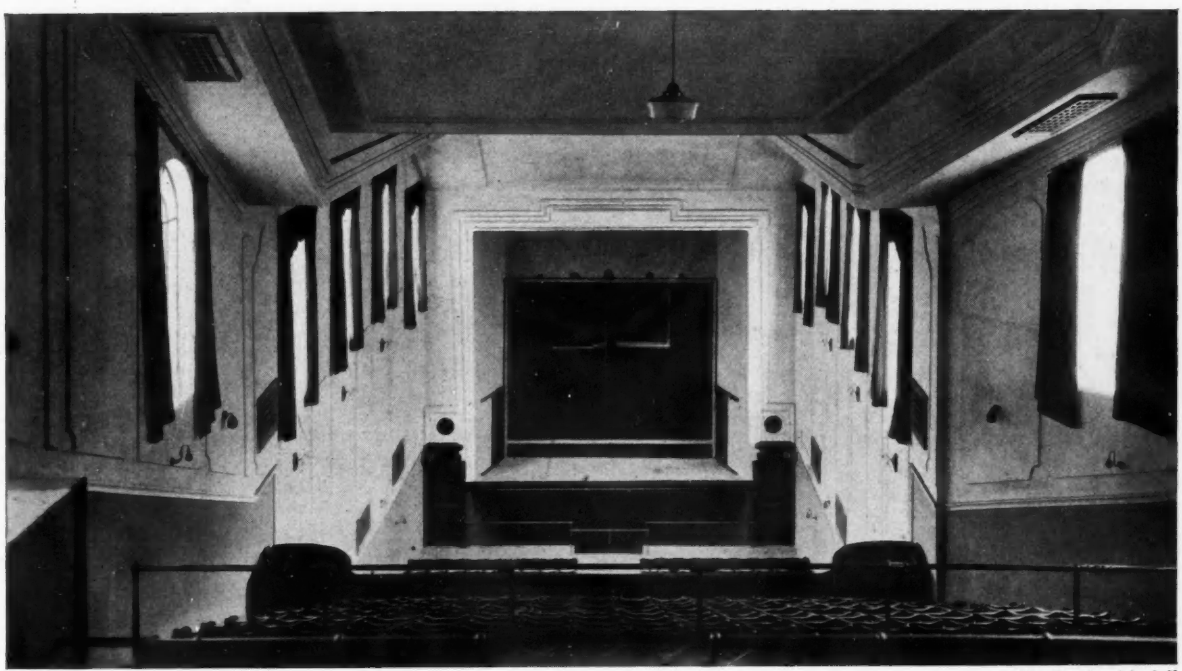
originally allotted to the bioscope chamber. This should be spacious. The practical requirements of the chamber are laid down (as far as safety is concerned) in the Cinematograph Acts and local bylaws. In practice, a comfortable size is from 25 ft. to 30 ft. wide, and about 11 ft. deep. A small rewinding room of about 60 ft. super is required, plus a room for running repairs, operator's room, and lavatory, and room for dimmers and colour-lighting control. Daylight is required to each.

Heating and ventilation require a volume to themselves. Some form of plenum system is very desirable, and, *provided it is run properly*, should give the greatest degree of efficiency. The most modern practice is to bring in the fresh air from the ceiling and extract it at the floor levels. Oil-burning boilers are used in preference to any others for the heating batteries.

Every important theatre requires a private projection room, say, 30 ft. by 14 ft., complete with bio-chamber and rewinding room; and there should also be accommodation for the orchestra (with lockers), music library, rooms for musical director, stage manager, and chief electrician; dressing-rooms (with bathrooms); wardrobe and property-rooms; and electrician's stores. Where a large stage is provided, there should also be carpenters' and paint shops, scene docks, etc. Quarters are often arranged for a resident caretaker. Rooms are required for staff, with lavatories, and a common room. The front of the house is the natural location for the offices, board-room, and secretariat. A dressing-room is required for officials.

WHERE TO PUT THE ORGAN

The position of the organ—now an integral part of every cinema—is of great importance. If situated anywhere back of curtain line its effect is lost, or, at any rate, badly handicapped, as soon as the tableaux curtains are closed. If placed on one side of the proscenium, the source of the music is too definitely located, and if divided into two sections—i.e. half on each side of the proscenium—the music is



[*By Charles Mitchell*

The interior of the New Palace, Edinburgh, showing the picture screen removed from the stage to reveal the installation of duplicate talkie horns in the space behind it, on the plan described in the foregoing article.

ipso facto divided also; hence there is only one alternative and eminently satisfactory position, and that is in the void of the roof immediately over the proscenium arch. Having this position in mind, one readily realizes the advantage of a short balcony soffit over the rear stalls. Mr. John Compton, the celebrated organ builder, agrees that this position is ideal for a cinema instrument.

POINTS IN PLANNING

Reverting to the smaller type of "longitudinal" hall, this often had a barrel-vaulted ceiling. Such a shape is about the worst possible from an acoustical point of view, and should talking apparatus be installed in such a building the vault should be covered with some recognized material of known absorbent coefficient to deal with the excessive reflection such ceilings produce.

The wider type of plan does not lend itself to vaulting, but rather indicates a domed ceiling. Unless of very long radius, or especially treated surface, domes should be eschewed. For the same reason the sky-treatment of atmospheric decoration should only be adopted with very great caution, otherwise acoustical faults will be inevitable in some part of the hall. The best form of ceiling is probably a flat type well broken up with coffering.

One of the difficulties in theatre planning is the apportioning of space in foyers, etc., for the people waiting to enter the auditorium after they have paid for their seats. The L.C.C. allow a certain amount of standing in the gangways and at the rear of the seats, the exits being calculated to cope with this excess. But the objection to outside queueing has led to the requirement of inside waiting-rooms, and some authorities are insisting upon room for about 20 per cent. of the seated accommodation, and further exits must be arranged accordingly. In calculating exit footage, it is therefore obviously impracticable merely to allow the usual 5 ft. per 250 seats, when standing, waiting-rooms, foyers, tea-rooms, etc., are taken into account.

In actual practice, those officials of county authorities who know their business examine plans on their merits, as it is obviously impossible for any set of bylaws to be universally applicable to every intricate theatre plan—although there are, alas! still some people who regard their little books of rules as of paramount importance, and the public as a Gadarene herd. Nevertheless, "safety first" should be the motto of every theatre architect. Intelligent application of sound by-laws and fire regulations, the employment of fire-resisting materials where possible, and the proper distribution of exits, where they are of most use, are the real essentials.

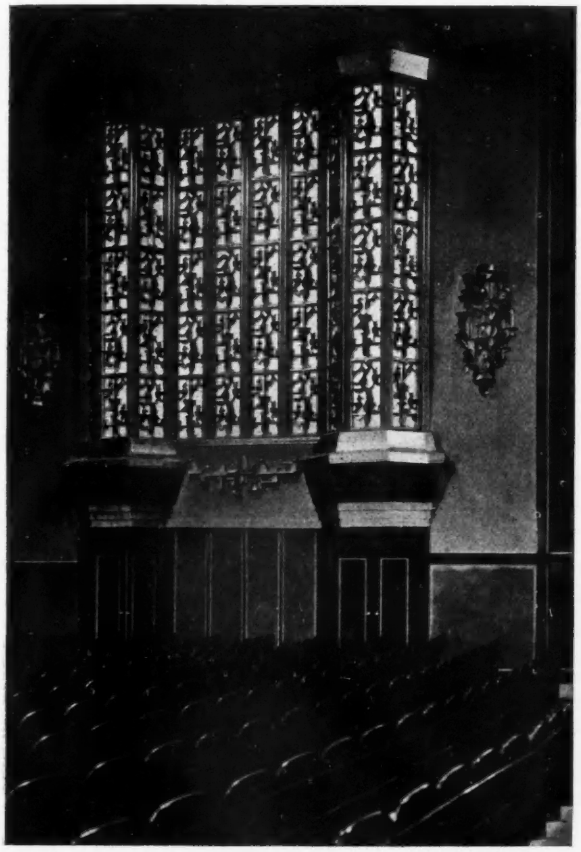
POINTS OF : THE ORGAN SCREEN : DETAIL



Titania Palast, Berlin.] [*By Schöffler, Schlönbach and Jacobi.*

In this Berlin theatre the organ, with its two ranks of visible pipes by way of screen, is ancillary to the parabolic proscenium arch, which thereby itself takes on something very like the expression of the lip of a gargantuan organ-pipe. *See also page 746.*

POINTS OF: THE ORGAN SCREEN : DETAIL



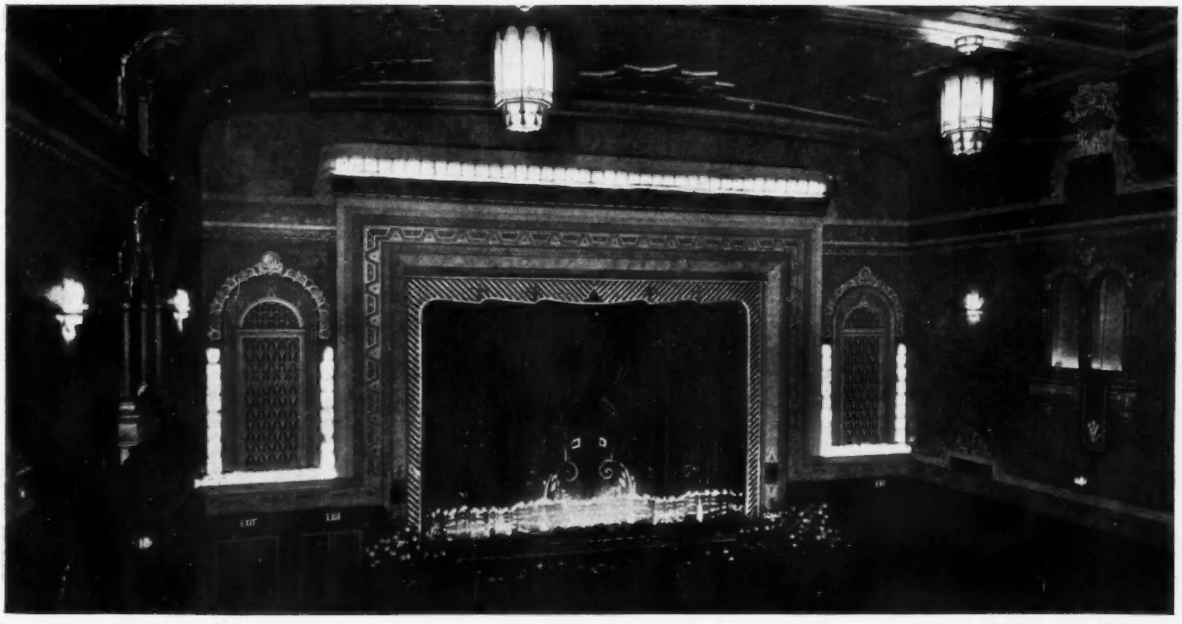
Mercedes Palast, Utrechterstrasse, Berlin. [*By Fritz Wilms.*

In this instance, from Germany, not only is the organ divided into two halves, but they are removed some distance from the proscenium, and the screens, with their interior lights, are made conspicuous decorative features of the house.



Olympia-Gaumont, Bordeaux, France. [*By M. Tournier.*

Another example of divided organ screens. The French architect disposes them modestly but frankly where the eye notes their function at a glance, but is not thereby distracted from the wall-paintings on which reliance is placed.



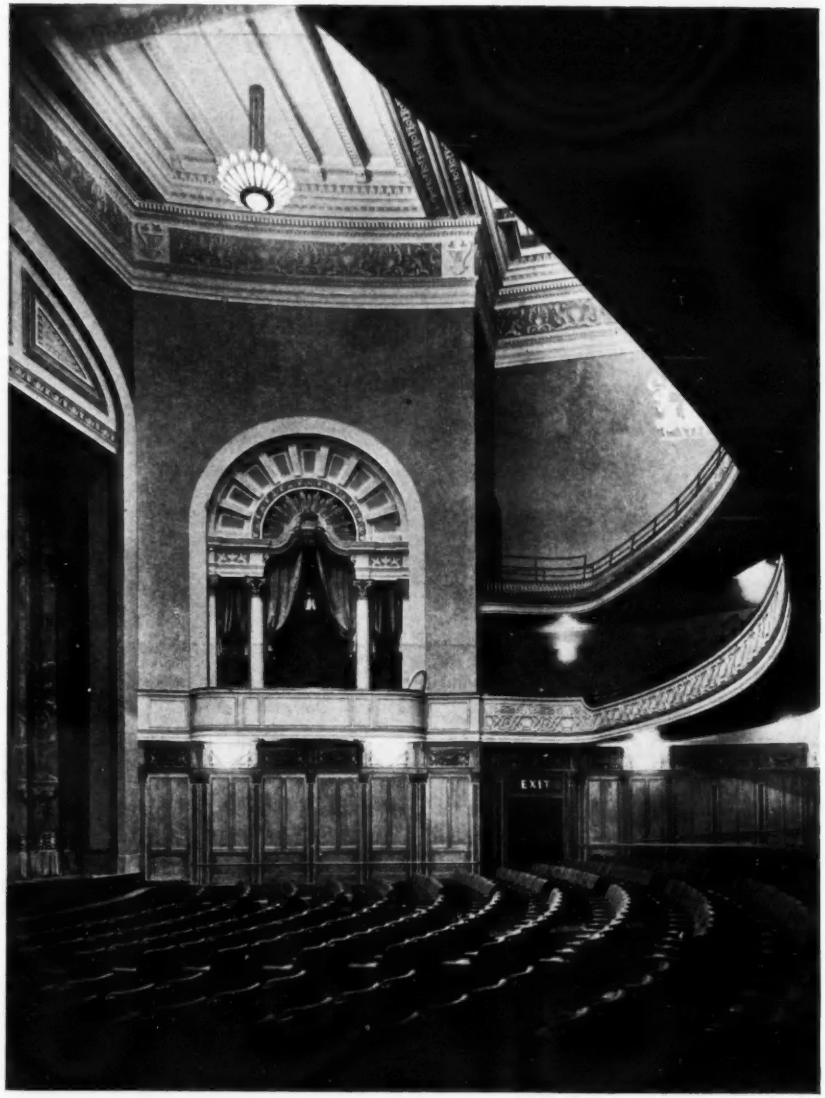
Queen's Cinema, Forest Gate, E. [*By Leathart and Granger.*

A halved organ, typical of English practice, occupying a position of prominence, yet not unrelated to other features of the composition.

THE ORGAN SCREEN



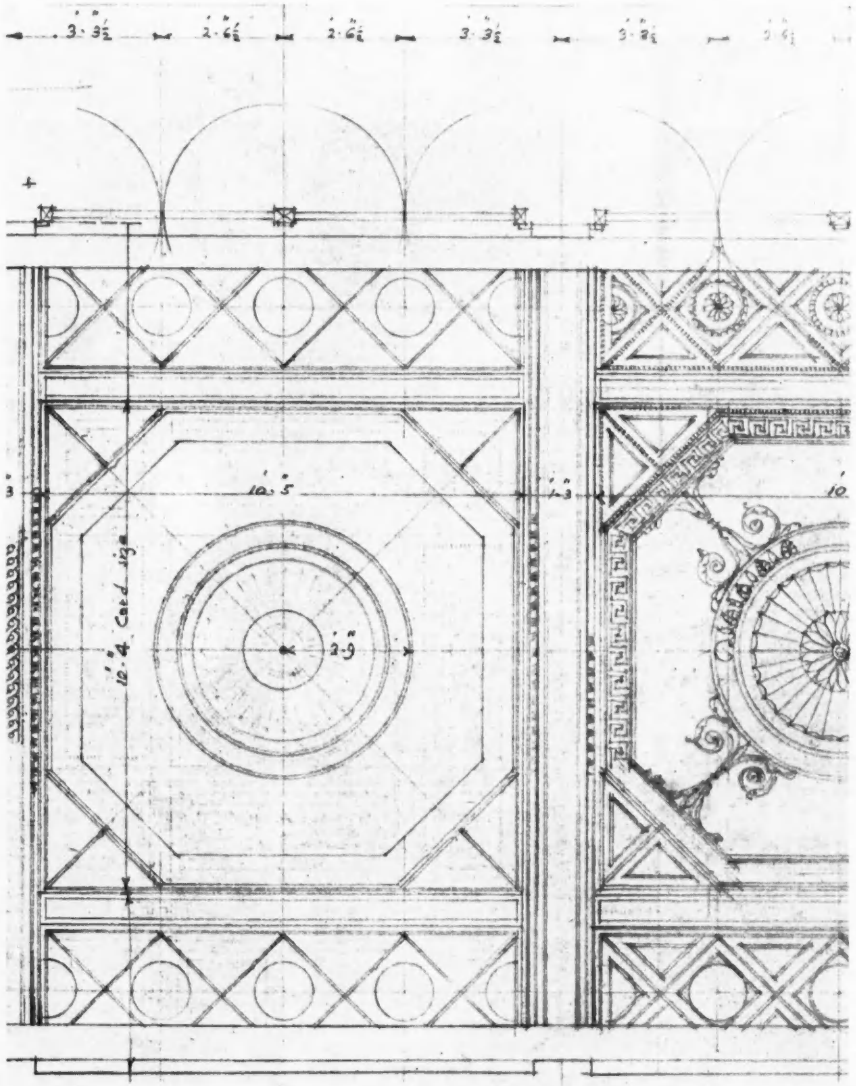
A general view of the exterior, which, today, is obscured by cinema posters. The difficult gradations from the plain wall to the enriched tympanums are dexterously maintained, the filling of these being beautifully disposed as regards light and shade.



The auditorium has gold scrumbled walls, the lower part of the wall round the stalls being panelled in golden brown oak, while the boxes are in cream and grey, picked out in dull pinks and bands of Wedgwood blue and white. The house seats over 1,000.

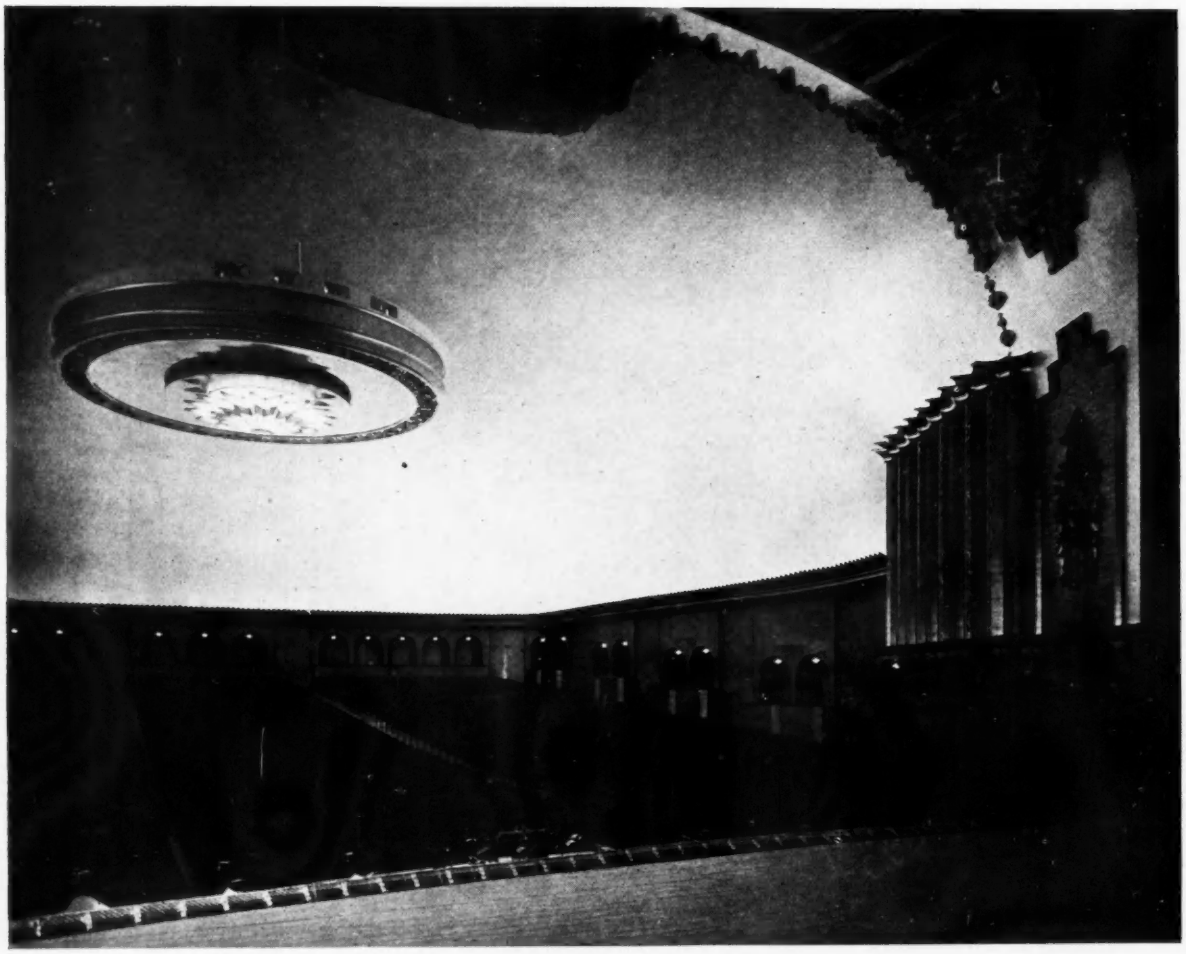
CARLTON: HAYMARKET



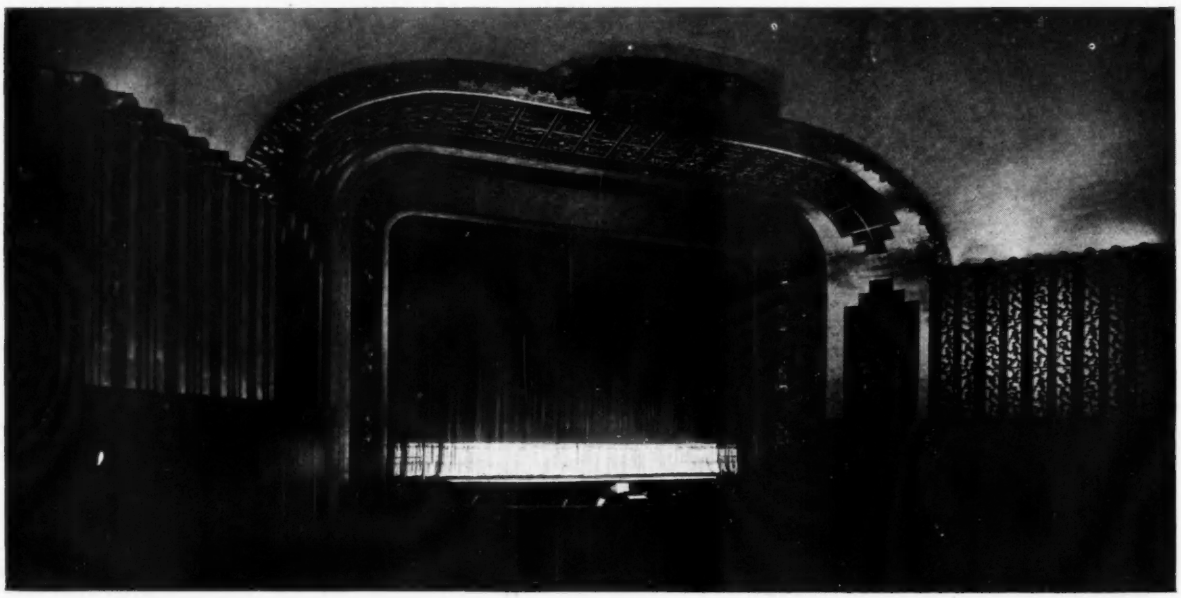


Carlton Theatre, Haymarket, London, S.W.] [*By Frank T. Verity (Verity and Beverley).*

On the left is a photograph of the entrance foyer. The walls of the hall and vestibule are scrumbled with blue and silver, and the contrast between these approaches and the scheme of the auditorium proper is most effective. The drawing on the right is a portion of the architect's detail of the ceiling of the foyer.



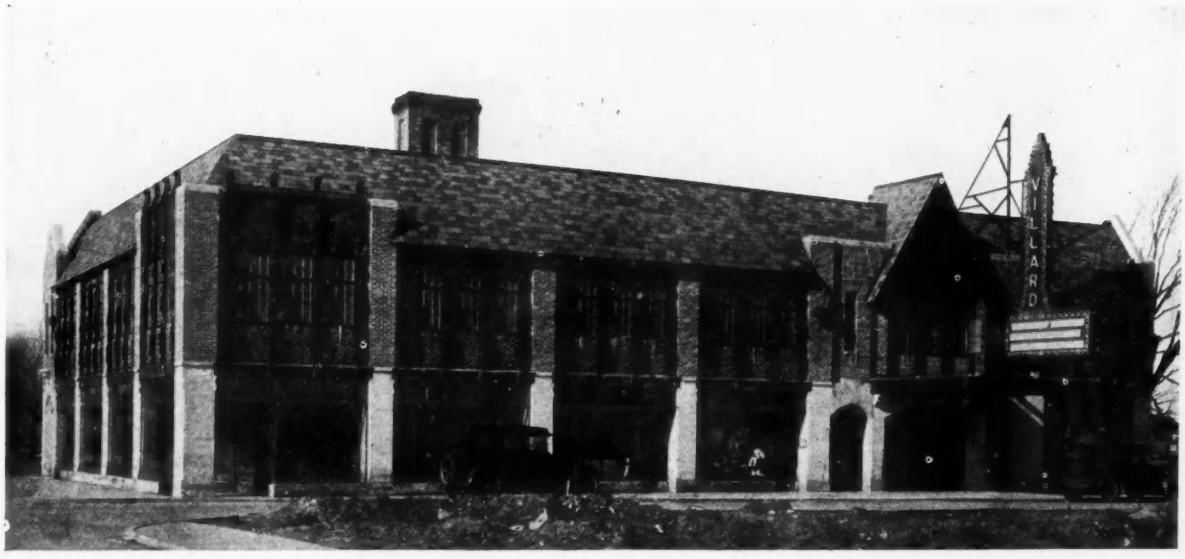
The seating in this large theatre in one of the poorer quarters of Berlin is all on one floor, which accommodates over 2,000 spectators. The projection-box is built into the roof—a sort of inverted conning-tower, with a large lighting fitting suspended from it. It contrasts curiously with the Moorish aspect imparted by the arcaded loggias.



Mercedes Palast, Neukölln, Berlin.] [*By Fritz Wilms.*

On either side of the stage are the organ screens with ornamental grilles over the louvres, which are placed so as to reflect the sound into the body of the house. Both these and the weighty proscenium arch, with its hood, doubtless added for acoustical reasons, seem at variance with the decorative scheme of the auditorium proper, like the enormous ceiling-box referred to above.

MERCEDES : BERLIN



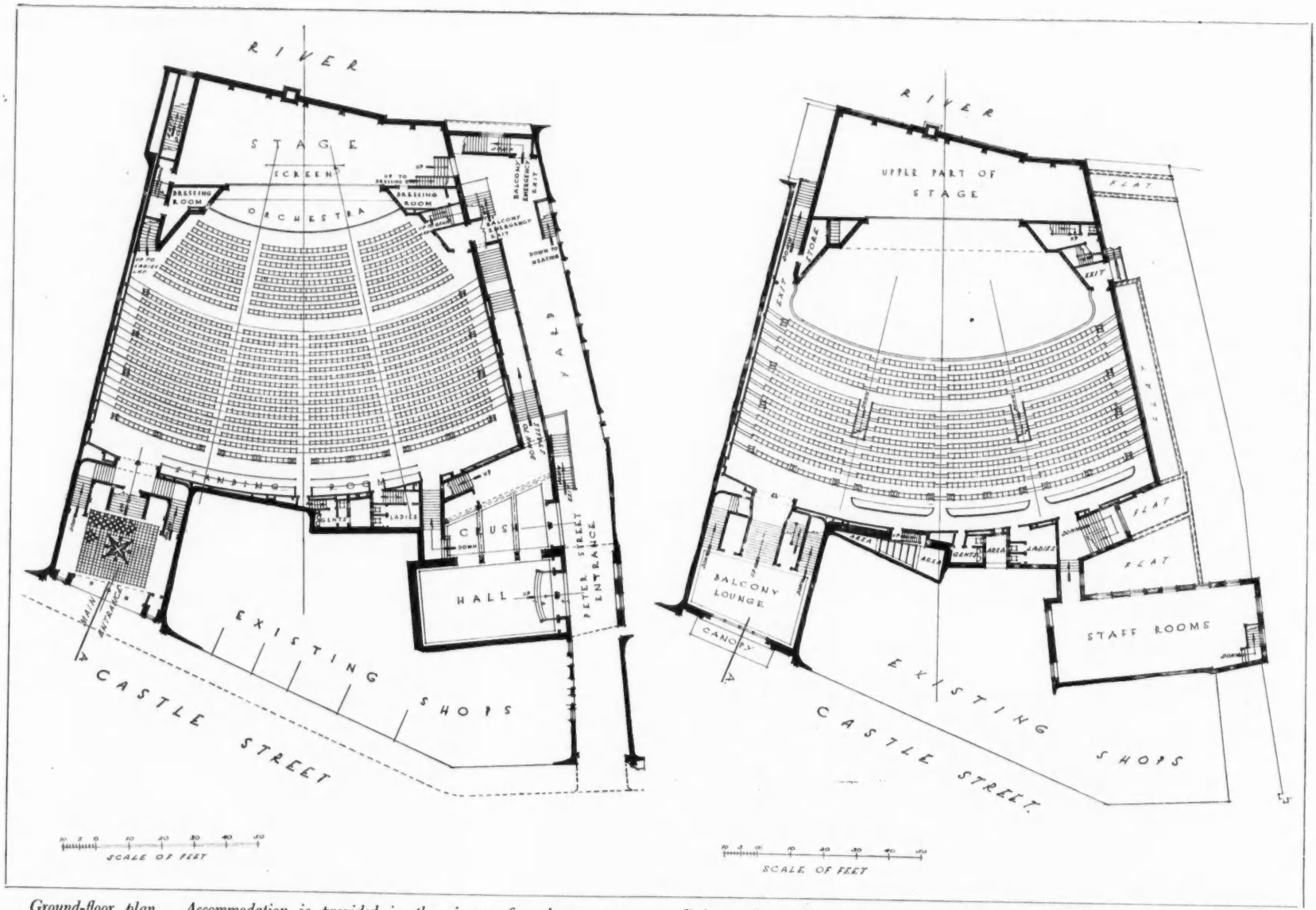
This cinema exterior in a semi-rustic style is quite a novelty. The gable emphatically marks the entrance to the building, but this feature does not look its best when it surmounts a marquise, nor is it harmoniously associated with a vertical sign so large as to present a rival point of interest in its immediate vicinity, to say nothing of the steel framework supporting it.



Villard, Chicago, U.S.A.]

An interior of this kind is perhaps inspired by the art of the lace manufacturer. It need be none the worse for that, for decorative motifs derived from whatever source, if well composed, justify themselves. The way, however, in which the balconies of the orchestra and organ boxes conflict with the line of the proscenium arch is most unhappy.

VILLARD : CHICAGO



Ground-floor plan. Accommodation is provided in the cinema for about 2,400 patrons. The structure is steel framed, with brick panels, the main entrance front being in stone and bronze. Interior lighting is reflected from behind the cornices.

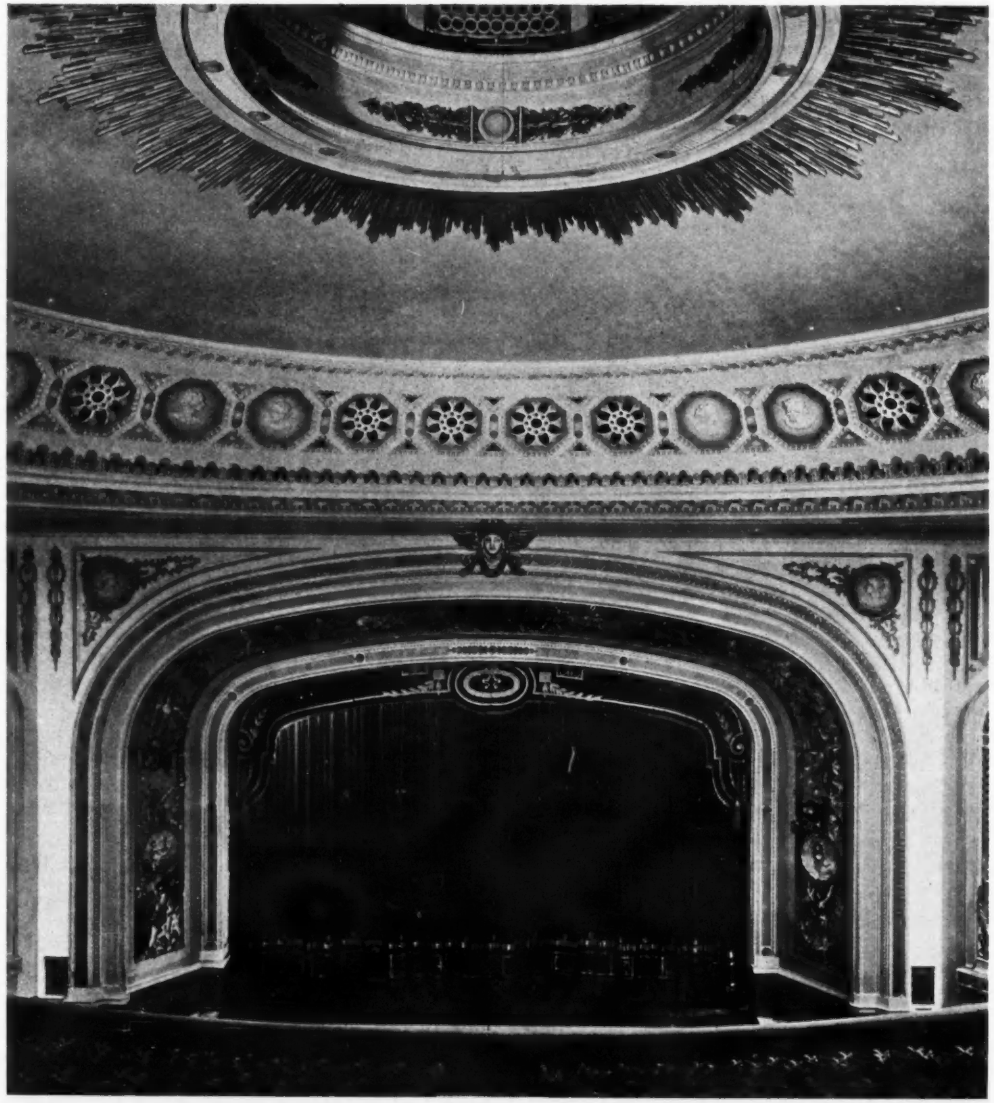
Balcony plan. The main girder supporting the balcony is 112 ft. long, 106 ft. between supports, and 8 ft. 3 ins. deep. It weighs 60 tons. Beneath the balcony is a spacious tea lounge, which has been designed with an arcaded treatment.

REGENT : BRISTOL



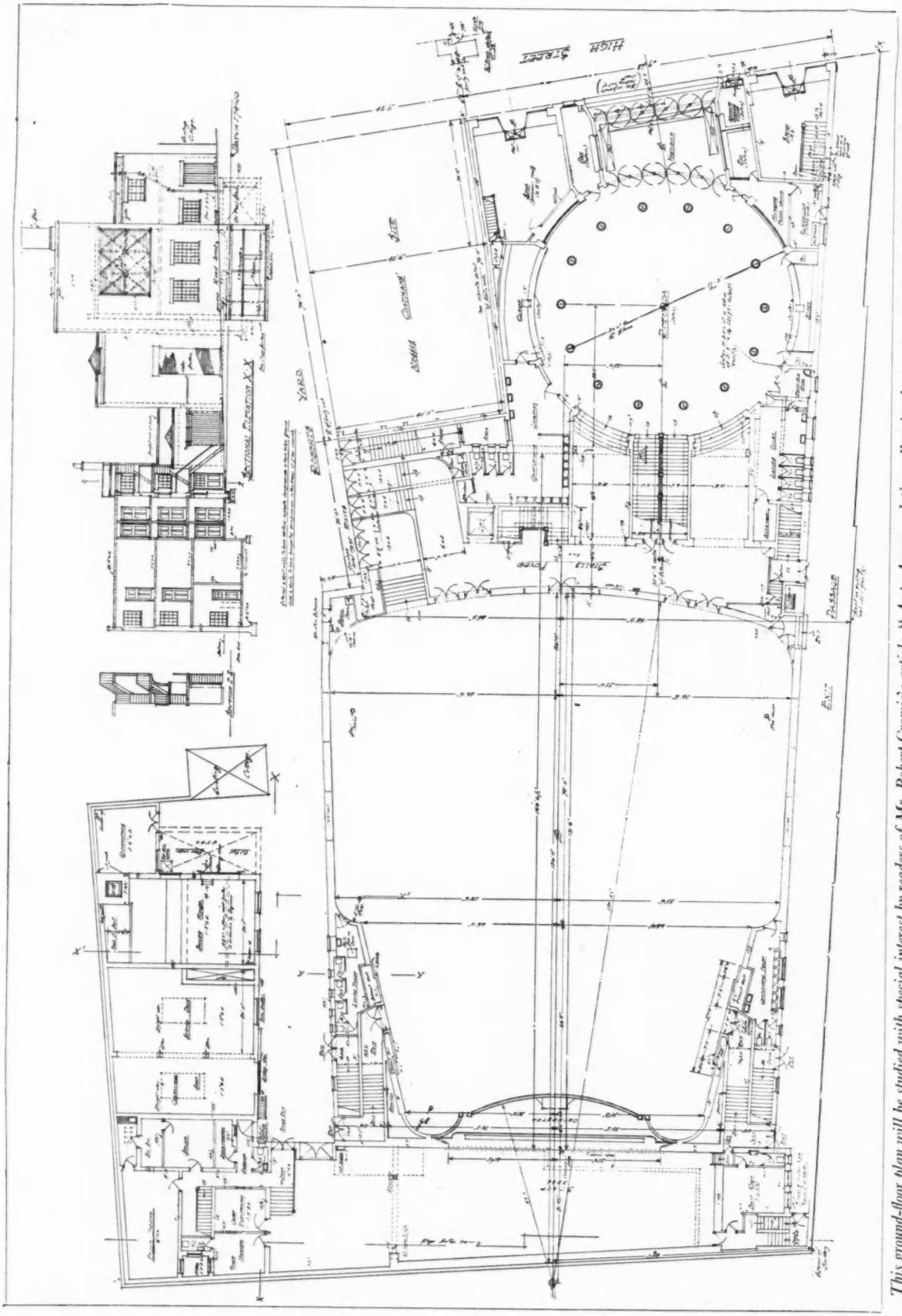
Regent, Castle Street, Bristol.]

The exterior gives little clue to the size of the theatre, being the frontage to a corridor leading to the site. It opens into a corner of the auditorium, and is utilized to give a spacious staircase and also a lounge for the use of balcony patrons.



[*By W. H. Watkins.*

The stage has a floor area of over 2,000 sq. ft., and has been planned for the production of all forms of entertainment. On the splayed reveal of the proscenium is a fresco of carnival figures. Ivory and Titian reds, blended with soft green and gold, form the colour scheme for the interior. The dome is 70 ft. in diameter, and the effect of the sun-burst and cloudy-blue treatment is enhanced by reflected lighting.

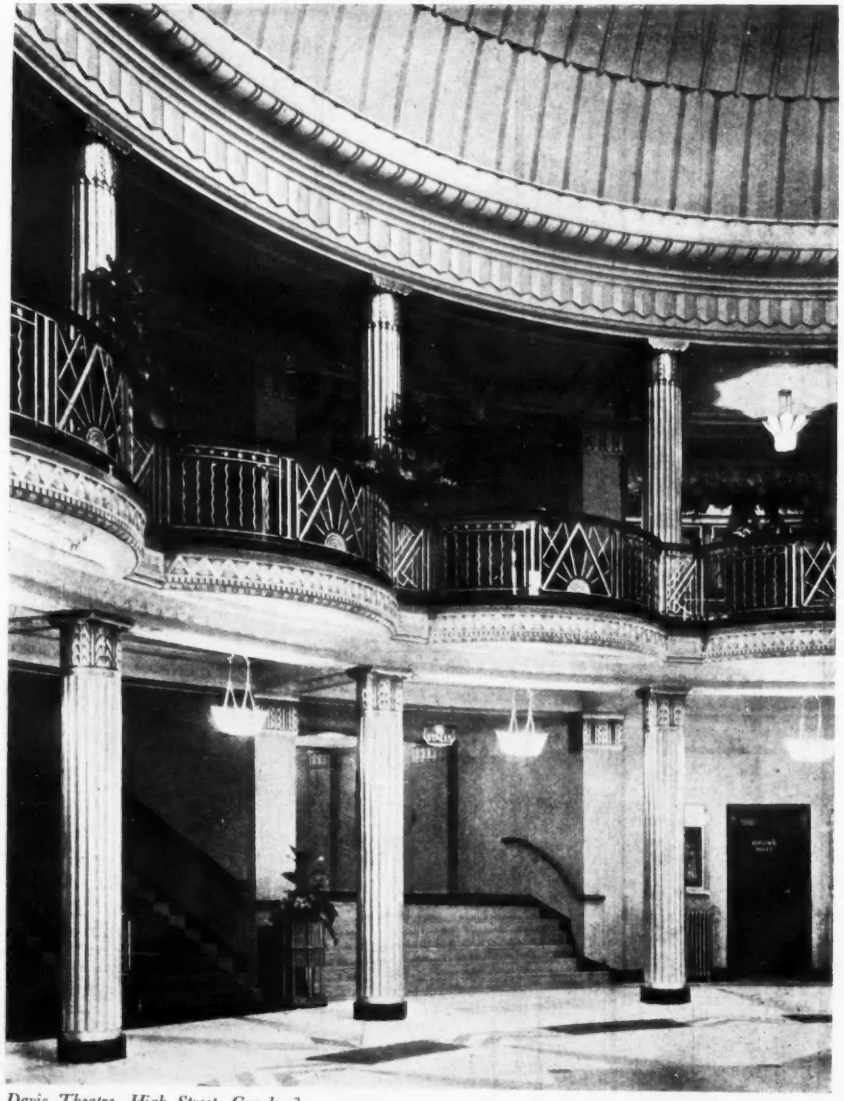


This ground-floor plan will be studied with special interest by readers of Mr. Robert Cromie's article, "As to Accommodation—" printed on pages 729 to 732 of this issue, for it illustrates many of the points discussed by him. Advantage has been taken of the irregular shape of the site to provide a striking feature in the rotunda, into which the main entrance vestibule opens. The very comprehensive nature of the accessory accommodation can also be appreciated. A modern cinema is, in fact, taking on the aspect of a complete self-contained colony, equipped with all the necessities of existence, except sleep.

DAVIS : CROYDON

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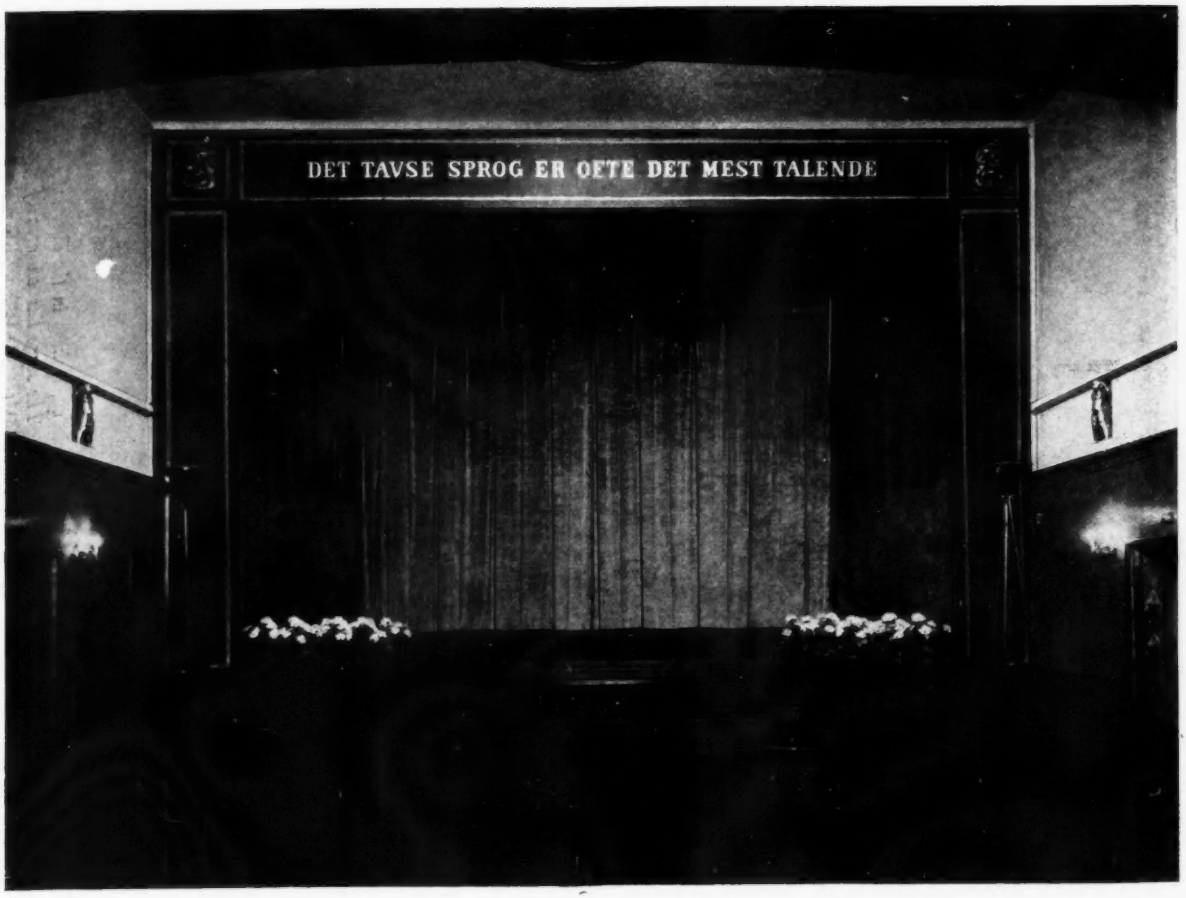
Davis Theatre, High Street, Croydon.]

The rotunda as seen from near the entrance vestibule. The short flight of stairs is one of a pair leading to the stalls foyer ; between them is that leading up to balcony level, also provided with a large foyer. Over the rotunda is a tea balcony, with dancing floor.

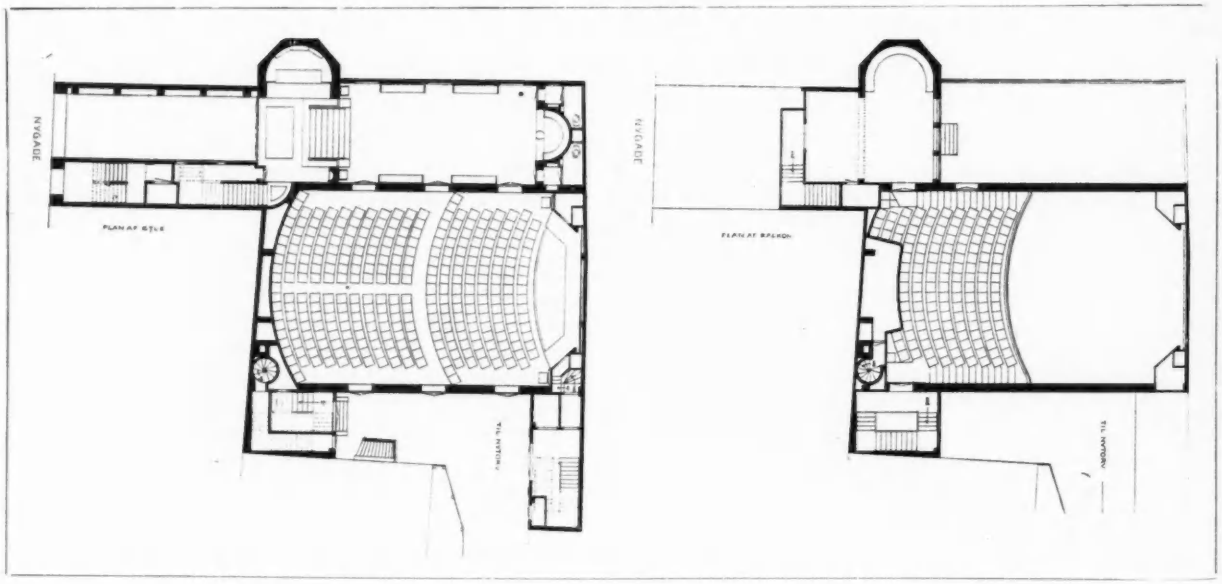


[By Robert Cromie.

A corner of the house as seen from the balcony, looking in the direction of the stage. In all, seating is provided for 3,800 persons. The stage has an area of 3,000 ft., and is very completely equipped for theatrical purposes. A passenger-lift serves all public floors.



The proscenium opening is of chaste design. It is clear that the architect has tried to solve the difficult problem of relating the side galleries to the proscenium opening. The row of tassels in the splays of the opening takes up the line of the parapet of the balcony, and even the braziers are proportioned and placed with care.



Alexandra Theatre, Copenhagen, Denmark.] *[By Valdemar H. Hammer.*

Plans of the stalls and balcony floors. In this rather difficult site it was necessary to place the foyer at the side of the cinematograph hall. The planning, however, has an air of spaciousness, and the entrances and exits are very well managed. The theatre is named in memory of her late Majesty, Queen Alexandra.

ALEXANDRA : COPENHAGEN



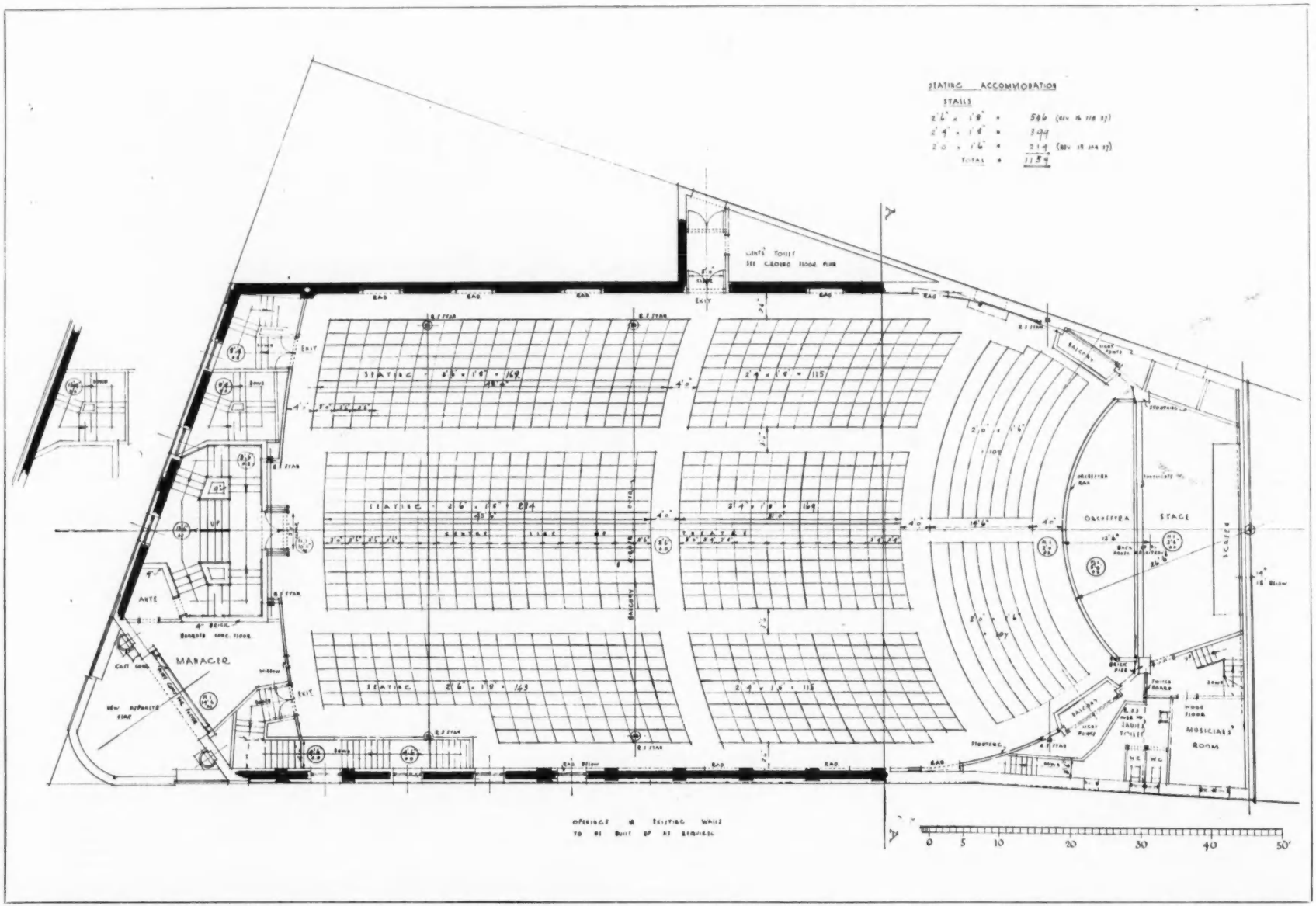
This simple and elegant design displays not only great care in composition but thoughtfulness in detail. It is an original idea to divide the balcony parapet into panels by a series of sculptured infants. The only criticism which may be directed against the design is in respect of the too conspicuous circular mirror on the soffit of the balcony.



Alexandra Theatre, Copenhagen, Denmark.] [*By Valdemar H. Hammer.*

In the composition of the foyer it is an element of cohesion that the two doorways and the niche are of the same height. Thus, in spite of the fact that these features are of such multifarious design, the room appears restful. Nor will it escape attention that the many and contrasting decorative details introduced are, in themselves, complete and agreeable entities.

ALEXANDRA: COPENHAGEN

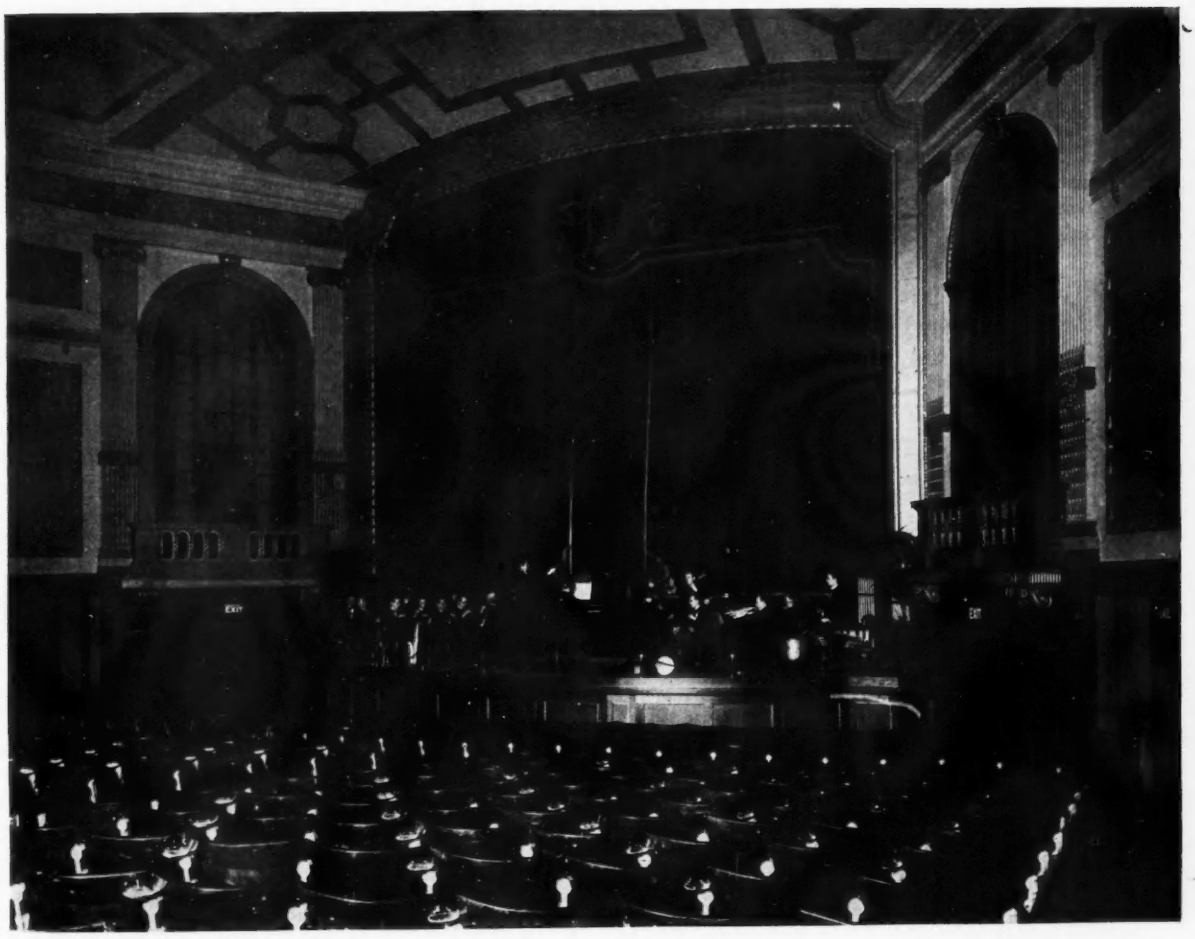


Cinema, Westgate Road, Newcastle-on-Tyne.] [*By Percy L. Browne.*

This cinema, the stalls plan of which is shown, provides seating accommodation for 1,900 persons. The screen is almost on the back wall of the stage, yet, owing to the long shape of the hall, every seat gives an uninterrupted view of it. On the first landing is an illuminated fountain with colour-lighting effects. The stalls accommodate 1,200 persons and the circle seats 700.



In the entrance foyer, with its timbered ceiling, a cigarette and chocolate stall faces the main staircase leading to the stalls and circle A complete service equipment is provided in the foyer on the first floor for the convenience of patrons.



Cinema, Westgate Road, Newcastle-on-Tyne.] *[By Percy L. Browne.*

A view of the proscenium, with the orchestra platform raised for a musical interlude. The platform is lowered when pictures are being shown. Lighting and other fittings were specially designed by the architect to harmonize with the ornate decorations.

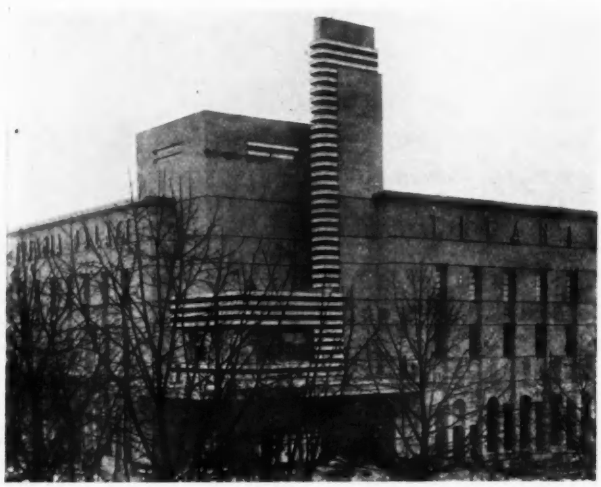
WESTGATE: NEWCASTLE-ON-TYNE

[By Percy L. Browne.

This cinema, Westgate Road, Newcastle-on-Tyne.]

This cinema, the stalls plan of which is shown, provides seating accommodation for 1,900 persons. The screen is almost on the back wall of the stage, yet, owing to the long shape of the hall, every seat gives an uninterrupted view of it. On the first landing is an illuminated fountain with colour-lighting effects. The stalls accommodate 1,200 persons and the circle seats 700.

N-TYNE



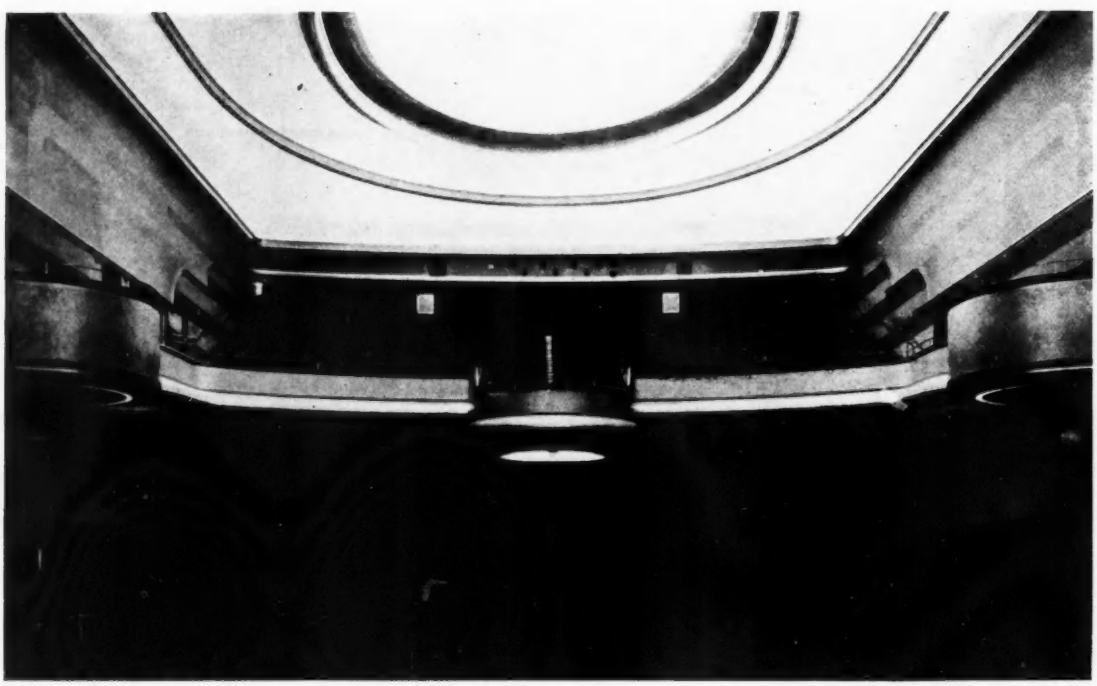


The exterior, shown by day, and, flood-and-neon-lit, by night certainly presents an unexpected conception of the palace of the Queen of the Fairies.

IN this design the exterior is more sensational than the interior. The façades have the merit of orderly fenestration, which is generally so difficult to attain owing to the presence of numerous minor apartments subsidiary to the cinema hall itself. The architect, however, has given up the attempt to solve the difficult problem of how to give external expression to a cinema, for he has designed two towers neither of which has any utilitarian justification.

These represent " stage " architecture, and exist only for effect. The broad, squat tower gives a suggestion of a fortress, but the tall slender one, having the dimensions of a chimney, is a novel feature, apparently introduced for no better reason than that it provides an occasion for a striking display of flood-lighting. The essential weakness in this method of design is that these illuminated " chimneys " have become a fashion, and in Continental cities are occasionally employed to give an artificial emphasis to the design of great commercial stores or blocks of offices.

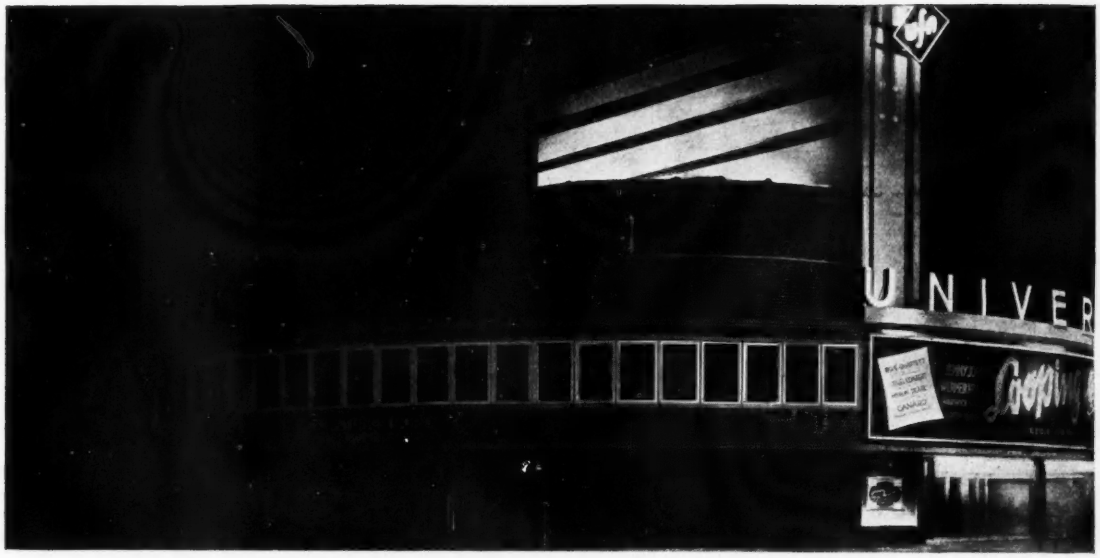
These features obviously *express* nothing ; they do not really belong either to a picture theatre or to any other type of building. The only way in which they could become useful and attain a measure of architectural dignity is by becoming *symbols*, just as a church spire is not necessary to a church but by general agreement has been confined to churches and so has come to be regarded as a convenient label for a church. Similarly, these illuminated chimneys might become a convenient label for a cinema, but in order that this result might be accomplished it would be necessary to disallow their employment in other buildings.



Titania Palast, Berlin.] [*By Schoffler, Schlönbach and Jacobi.*

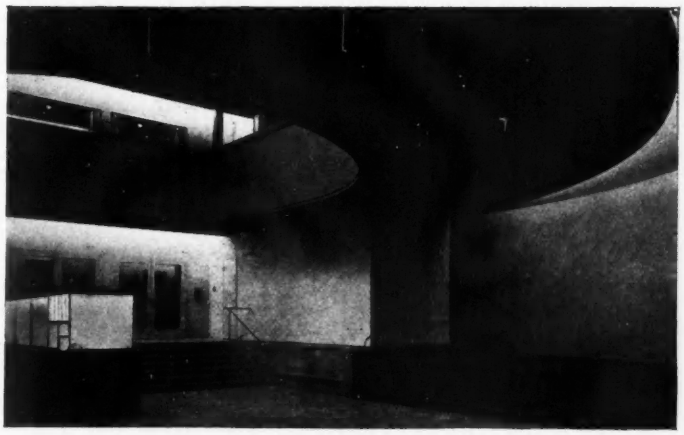
In the interior the three projecting bays of the balcony, utilized to supply cardinal points in the lighting system of the auditorium below, give a great deal of interest to the composition.

TITANIA : BERLIN



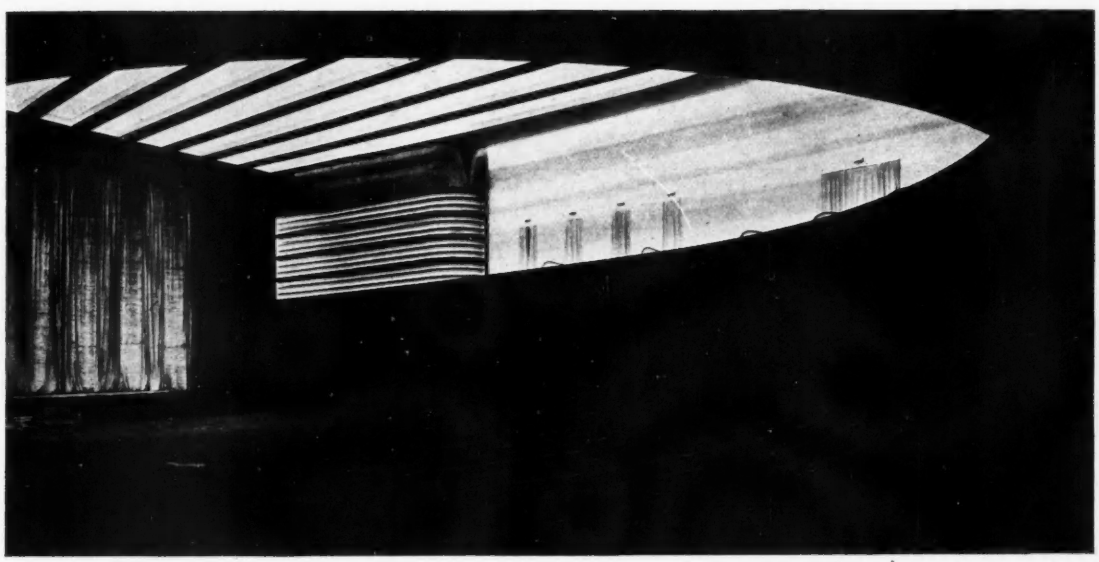
The long series of small windows suggestive of a railway train are a novelty in cinema design.

HERE is an interior composition which may be described as severe, yet the design has elements of coherence, for it will be observed that the steps in the foyer are related not only to a plinth or dado, which traverses the room, but are also enclosed in recesses specially prepared for them.



The functions of the circle and the ellipse persist in the foyer.

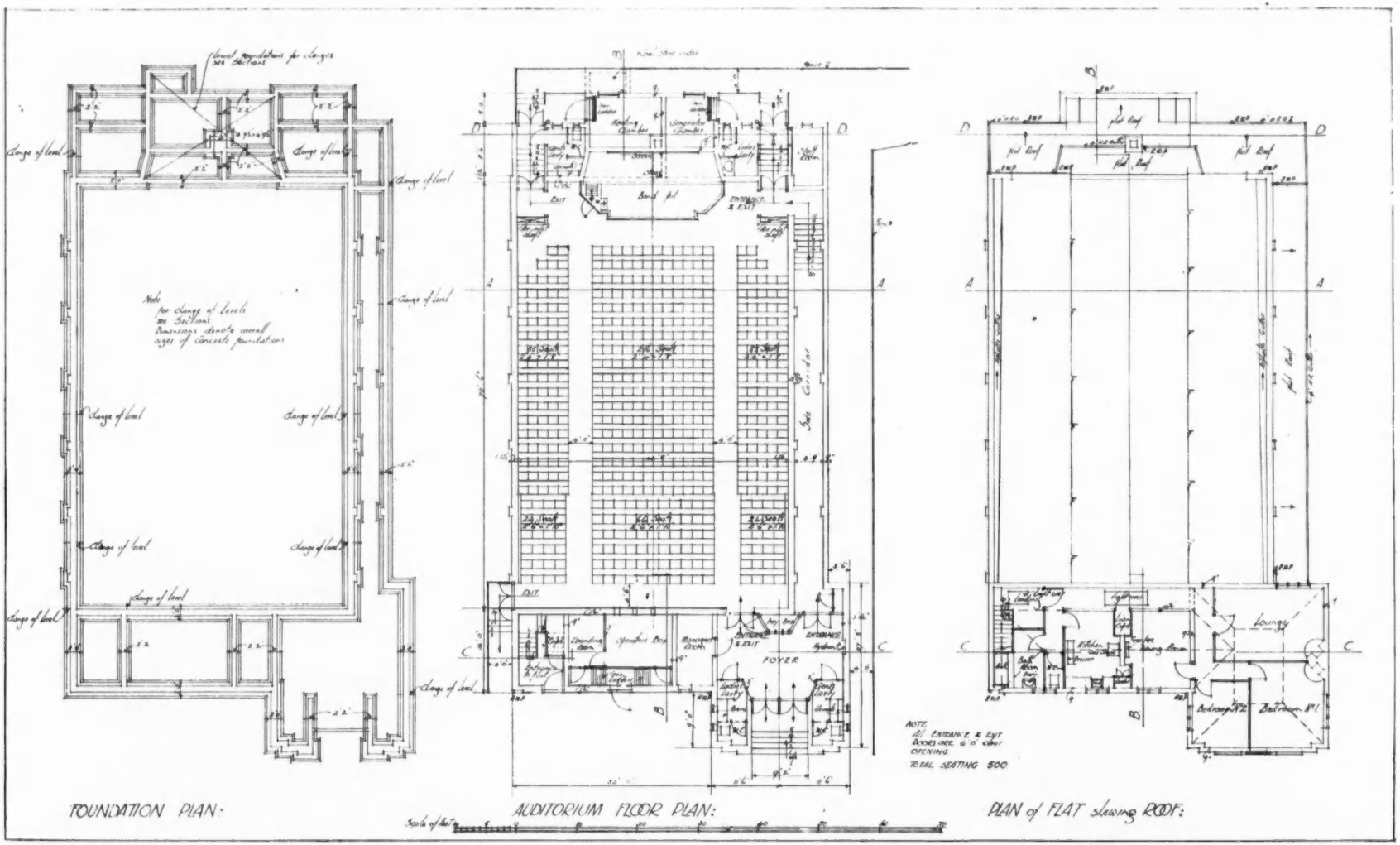
The dark tone of the balcony soffit provides an effective contrast with the light walls, while the bounding curves of this soffit are in simple and vigorous lines. In spite of the entire absence of ornament, we do not feel that the design suffers from over - simplicity. The windows, however, are not elegant.



Universum, Berlin.] [*By Erich Mendelsohn.*

Striking effects of lighting are here produced, but the design suffers from discord between the line of the balcony and the proscenium opening.

UNIVERSUM : BERLIN



Beaconsfield, Buckinghamshire.] [*By Leathart and Granger.*

The architects' plans of the foundations, the auditorium floor, and the residential flat above it. The floor of the hall is raked and the seating accommodation is intersected by two aisles, access to the higher-priced seats at the back being direct from the foyer, and to the lower-priced ones in front along a corridor. The auditorium is warmed by a floor system of heating, radiators being employed elsewhere. At the back of the screen, besides the heating chamber, is an engine-room for the generation of electricity. The residential flat has a lounge of good size, a dining-room, two bedrooms, kitchen, etc.



A general view of the front. This building harmonizes with the adjacent buildings, which are in Georgian style. It is faced with multicoloured bricks with stone dressings, and has a steel-trussed roof with green Cornish slates, and metal casement windows. The left small doorway leads to the flat above the auditorium; the centre one to the operator's box.



Beaconsfield, Buckinghamshire.]

The entrance hall, looking towards the box-office, showing the modern character of the decorative work.



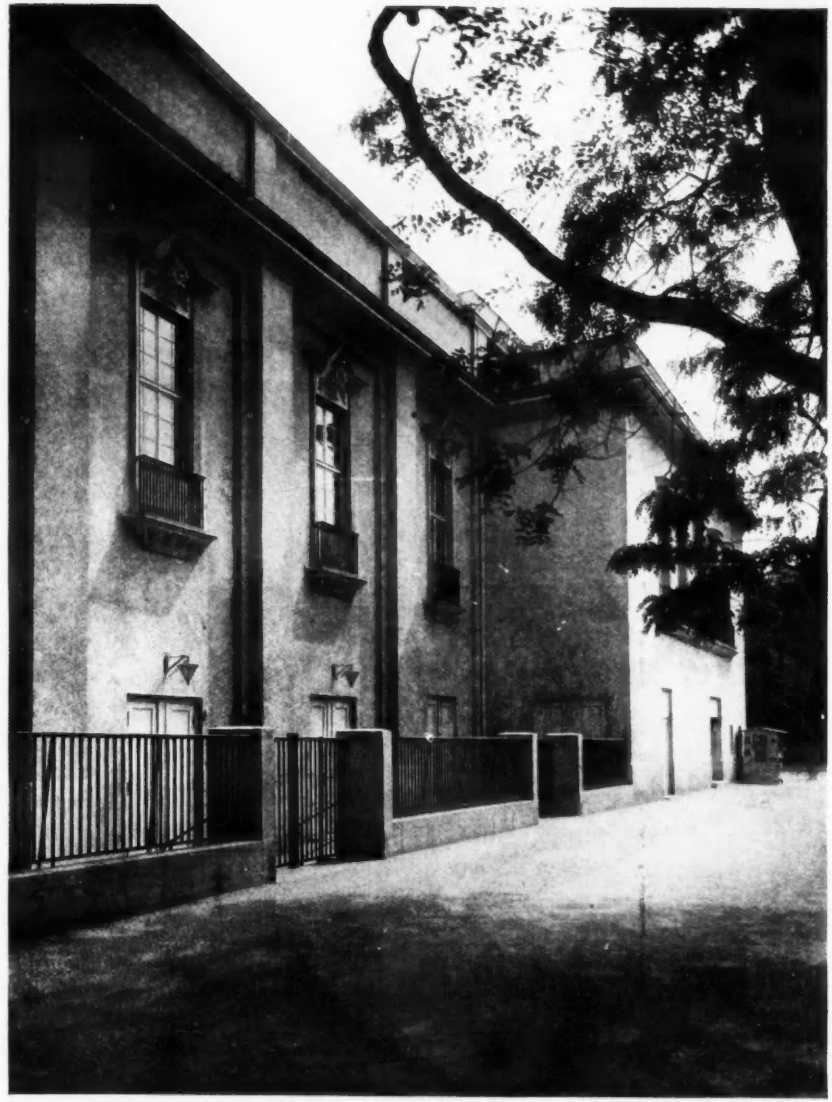
[By Leathart and Granger.

The proscenium and orchestra pit. The seating capacity of the single-floor auditorium is 500.

BEACONSFIELD: BUCKS



The main façade is of exceptional interest, inasmuch as it shows of what fascinating developments the Classic Order is still capable; the decorative cresting to the cornice gives quite a new note to this feature, while the pilaster treatment expresses very deftly the spirit of modernity.



Another aspect of this classically-flavoured twentieth-century building. It is a bold innovation to bring the pilasters right up to the cornice, yet the experiment is successful, for these elements are regarded merely as a framework for the windows, with their sculptured hoods and bases.

U.F.A. : BERLIN

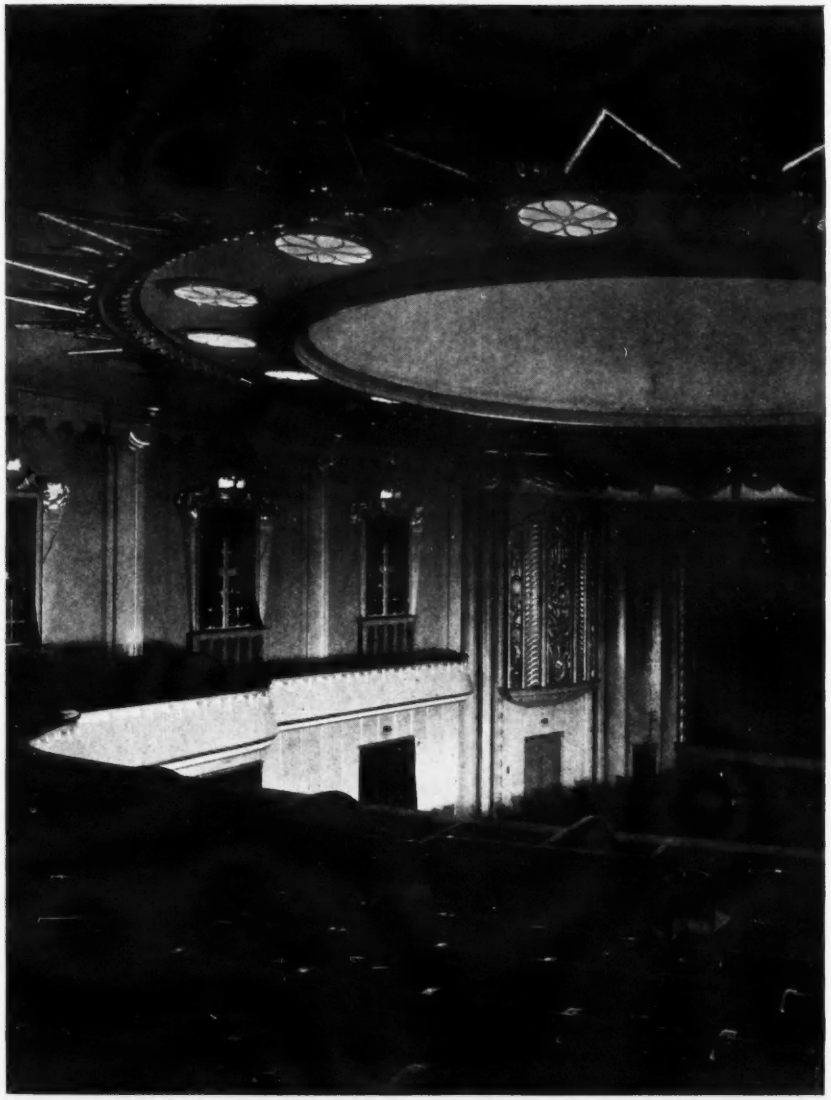
very deftly the spirit of modernity.

successful, for these elements are regarded merely as a framework for the windows, with their sculptured hoods and bases.



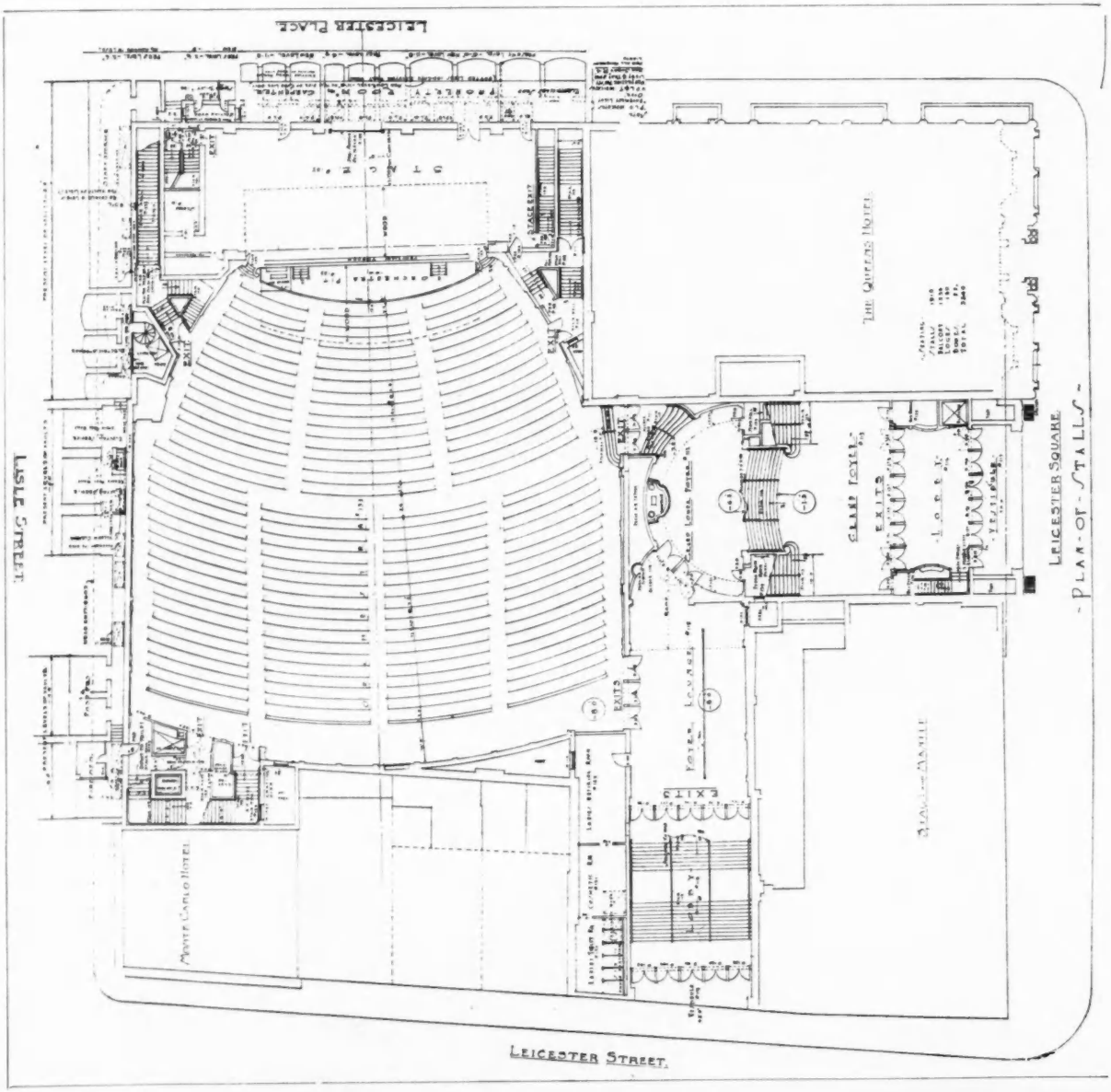
U.F.A. Theater, Turmstrasse, Moabit, Berlin.]

Many subtleties are expressed in this composition, in which the Classic Order is again put to new uses. The square columns, tapering towards their bases, are effective, and the termination of the entablature in the form of cresting instead of a cornice seems exactly appropriate for indoor use.



[*By Fritz Wilms and Bischoff.*

This seems a well-nigh perfect composition, in which the architects have taken a theatre form, whose appropriateness for its purpose has been well tried in the past, and have enlivened it with exceptionally beautiful detail. The lights are incorporated in the pattern of decoration in quite a novel manner.





EMPIRE: LEICESTER SQUARE

A view of the Leicester Square exterior taken at night; and the ground-floor plan. The stalls floor is of monolithic reinforced concrete construction, supported by brick piers, over a void beneath the floor, which forms a chamber from which vitiated air is extracted from the auditorium through perforations in the floor.



Empire Theatre, Leicester Square, W.C.]

The entrance to the tea-room, showing the plaster decoration, which is a special feature of the building, as remodelled for cinema purposes. Each piece of decorative plasterwork was specially designed, modelled in clay, moulded in gelatine, and cast in fibrous plaster.



[Frank Matcham and Co., in association with Thomas W. Lamb.

The auditorium, looking from the circle, showing one of the ornamental arches flanking the proscenium, with sunray and central lighting features in a plaster setting. Below this arch is a richly decorated exit doorway. The capacity of the building is 3,224.

ENTRANCES POINTS OF: ATMOSPHERIC



Tubs Hill, Sevenoaks, Kent.] *[By Charles J. Cable.*

A happily recast entrance. It supersedes excessively ornate plaster mouldings, enrichments and pediments.



Lido Cinema, Golder's Green, N.W.]

The motive of the interior shown in this perspective sketch organ screens are camouflaged as belfries. It is claimed in interior decoration on the atmospheric theory, first own cinema exhibitors. The house accommodates



Avenue, Birmingham.] *[By Rees and Holt.*

A classic arched portico in stone against brick walls that does not lack a quiet dignity.



Regat, Marble Arch, W.] *[By Clifford Aish.*

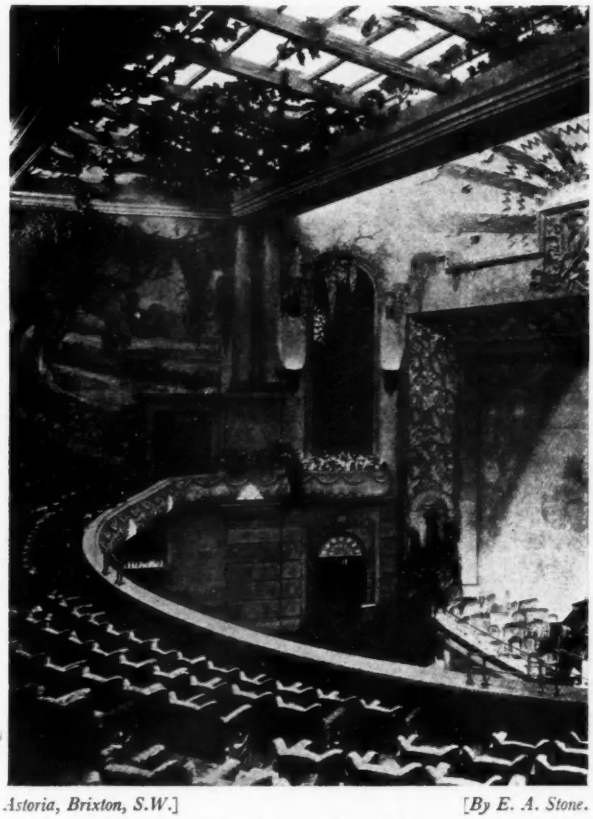
From Italy, again, has been taken this very positive garden effect, with its reproductions of famous sculptures, and its walls and arches in high relief.

INTERIORS : DETAIL FOYERS



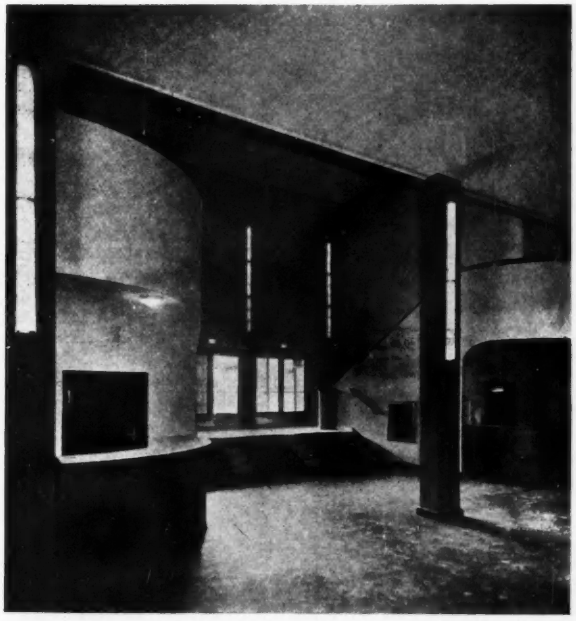
[By H. W. King.

is Venetian, with a lagoon and waterfront terrace. The that this represents the first essay to be made in this country exploited in America, and at present in high favour among our 2,500. The scenic artist was Guy Lipscombe.



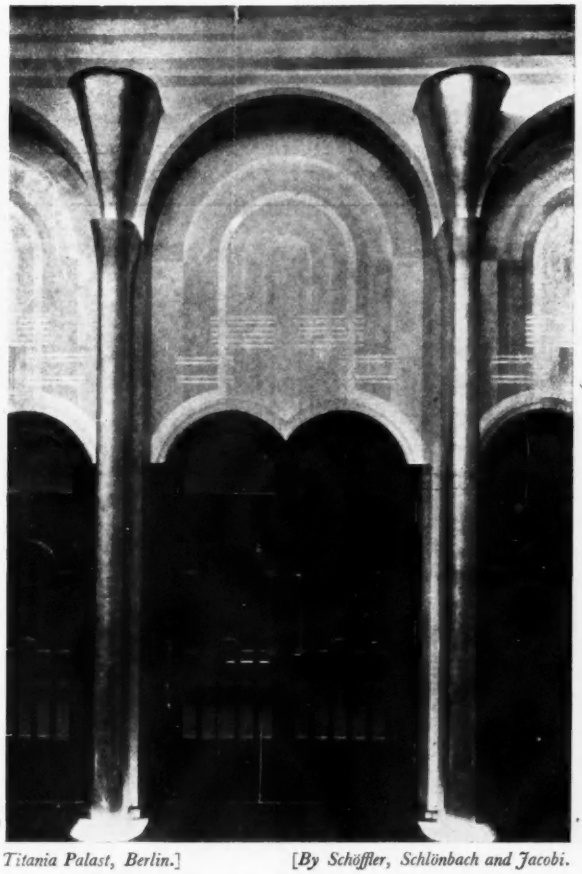
Astoria, Brixton, S.W.] [*By E. A. Stone.*

Overhead is the counterfeit presentment of a pergola, with vines. To the left is seen a lake which seems to hold promise of a drenching on exit.



Babylon, Berlin.] [*By Hans Poelzig.*

Form and lighting are manipulated to give an individual character to this severely bare entrance hall.



Titania Palast, Berlin.] [*By Schöffler, Schlönbach and Jacobi.*

An original doorway scheme ; the entrances to the auditorium boxes are seen across the gangway.

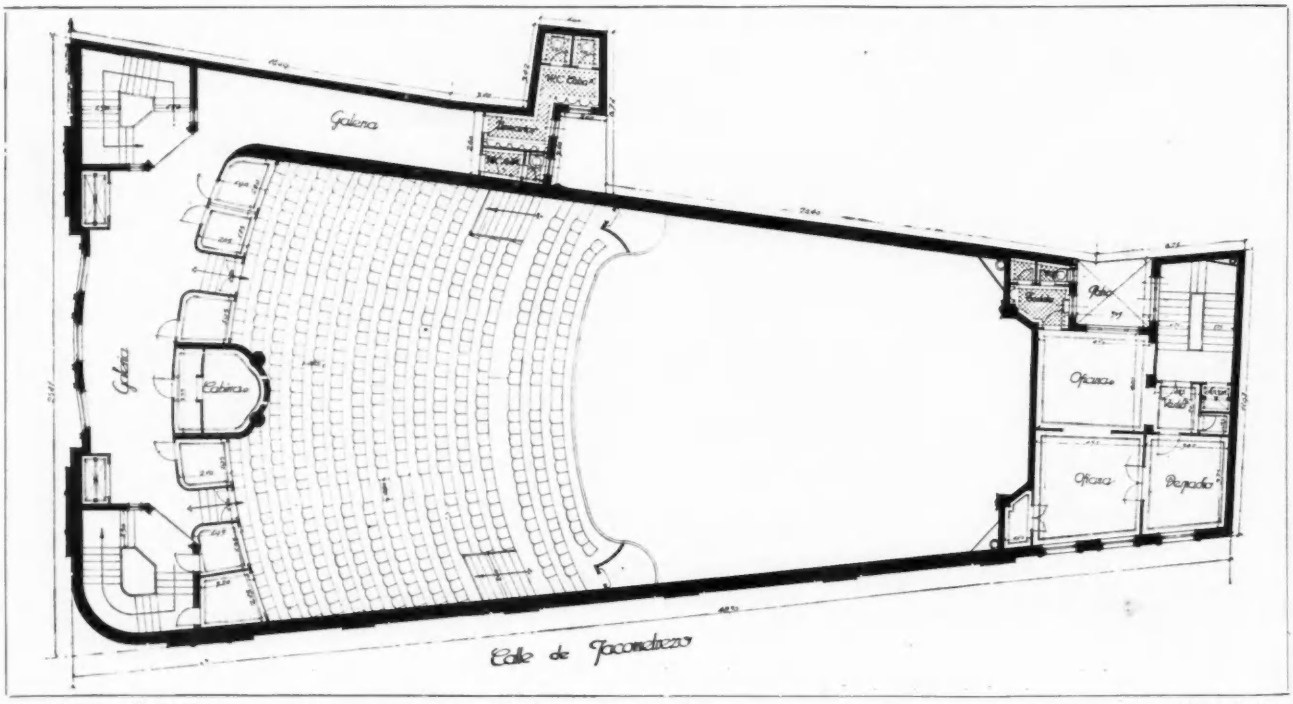
ATMOSPHERICS: FOYERS

The entrance is at the corner of a busy street in Madrid.

It has an architrave of granite with outside pay-boxes.



Seating capacity is for 1,333 persons : 822 in the stalls and 511 in the balcony. In addition to the cinema proper there is an open-air roof theatre, surrounded by a colonnade, which seats 800 people. The structure is of concrete.



Cine del Callao, Madrid.] [*By L. G. Soto.*

Plan of the balcony. Ample corridors run at the back and one side of the seating area. This floor also carries the projection box, which, it will be noted, is not on an outside wall, as in English practice. The space behind the screen is utilized for offices and counting-house. In the basement is a restaurant, complete with orchestra dais. Stairs connecting all floors are disposed in either front corner of the building.

CINE DEL CALLAO : MADRID

[By L. G. Soto.

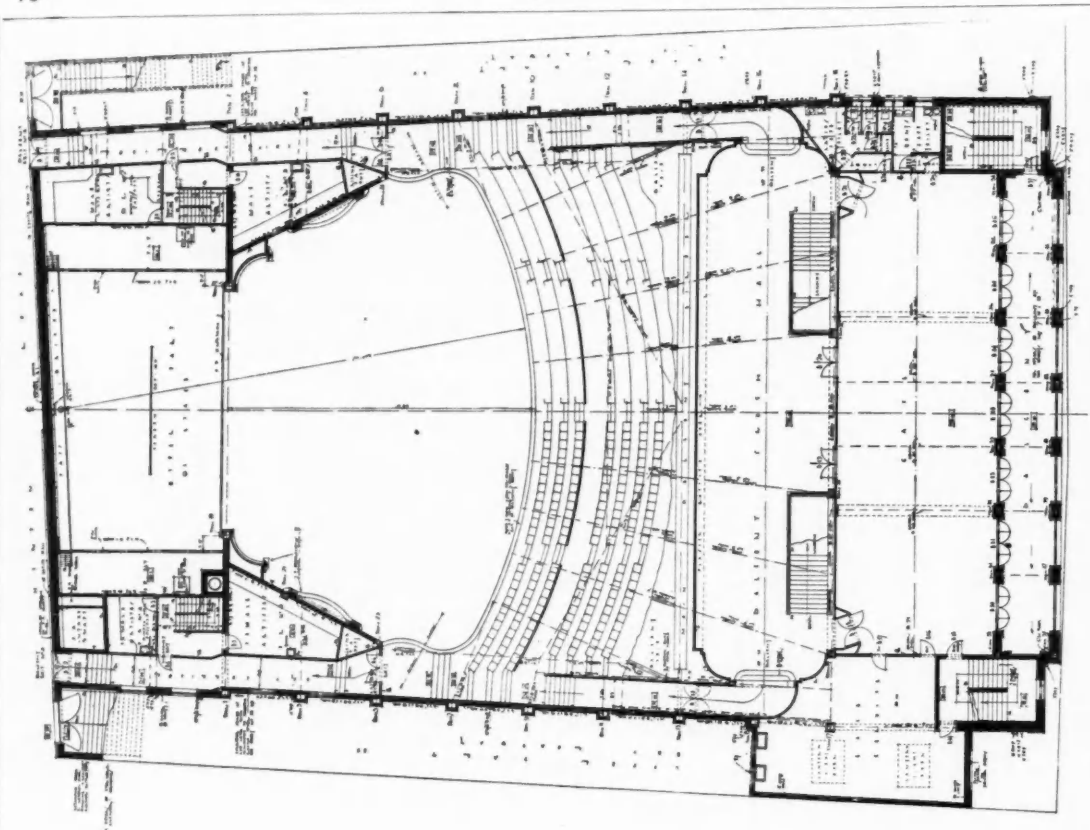
Looking upwards towards the balcony. In an English cinema the audience usually has one object—to see the film. The Spanish audience likes to be observed as well as to observe. Galleries projected far into the theatre are therefore not favoured, and intimate vestibules and spacious foyers are essential. This audience complained that the interior was underlit. Actually it was as well lit as any London theatre, but the lighting did not give a sufficient bloom to the complexions and dresses of the señoritas.

Cine del Callao, Madrid.]

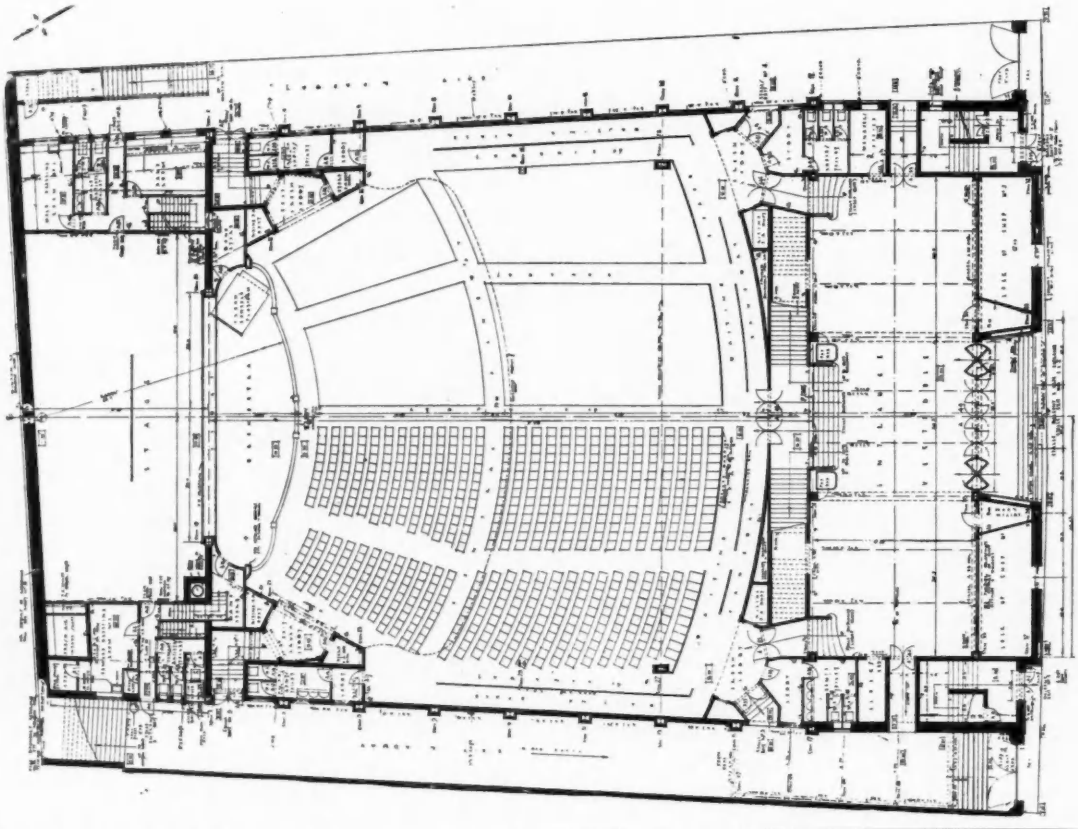
The proscenium. The walls of the Cine del Callao are painted in tempera, three coats, with a final semi-transparent tint. The general colour-scheme of the theatre is: panels, gold-yellow, with decorations of birds, stags, and dancing Dianas in greens, reds, and blues; pilasters, sage-blue with delicate gilding and touches of purple, supporting a gilded trellis of birds caught in a vine set on plate glass and illuminated from behind; proscenium curtains, prune velvet, braided with blue baskets of vermilion flowers.

CINE DEL CALLAO : MADRID

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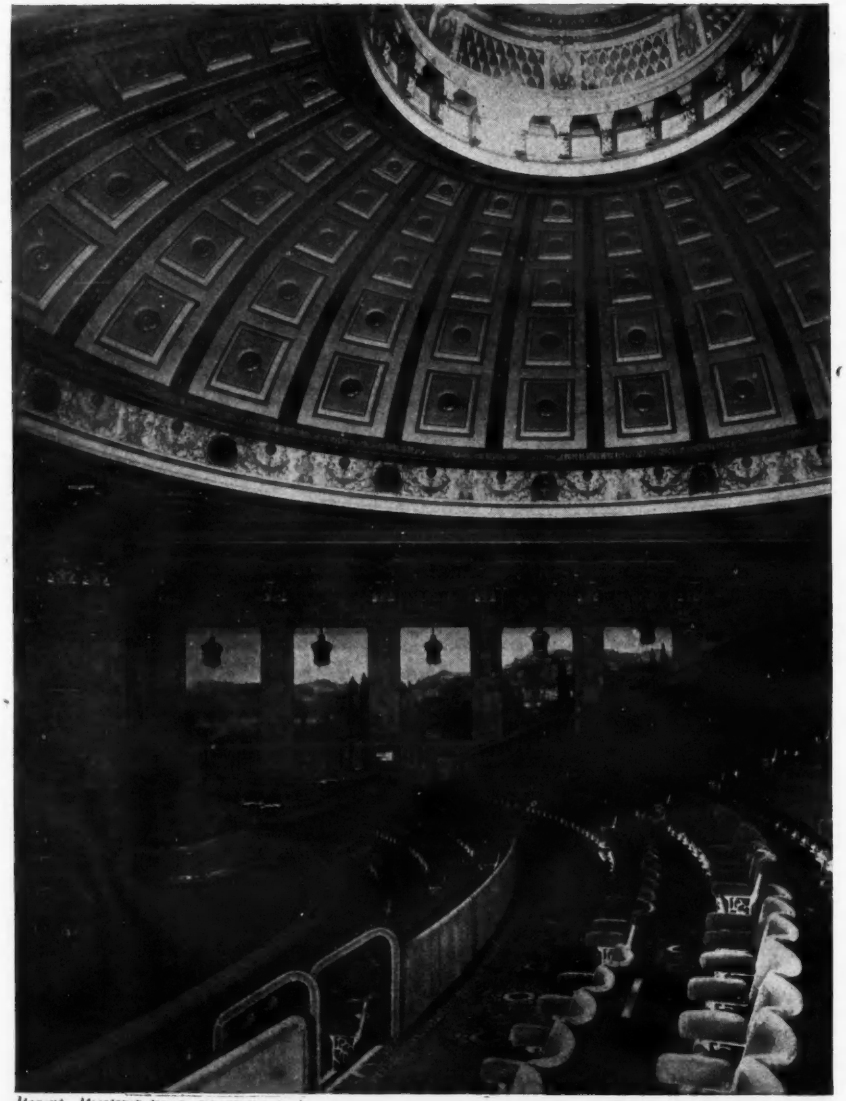


The balcony floor has, as customary, a large café, divided from the house itself by an ample crush-hall. The theatre seats 2,300 persons, and is faced, on the main front to Westover Road, with white terra-cotta. Its deep arcade supports a cornice, above which an attic story appears in red brick: the roof is of tiles.



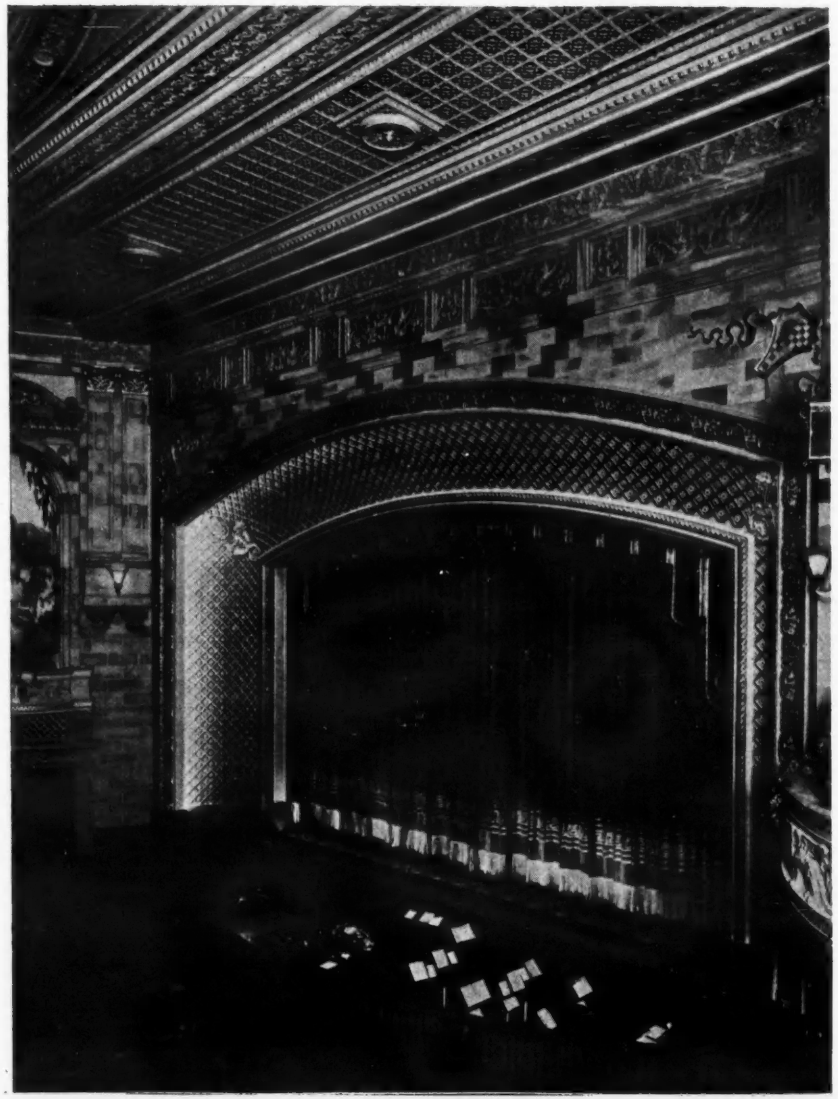
The ground-floor plan exemplifies the squarer shape followed in recent practice, and the very large area provided for patrons, apart from the auditorium itself, in which certain spaces are also set apart for those awaiting seats. The problems of rapid entrance and exit have also received special attention.

REGENT : BOURNEMOUTH



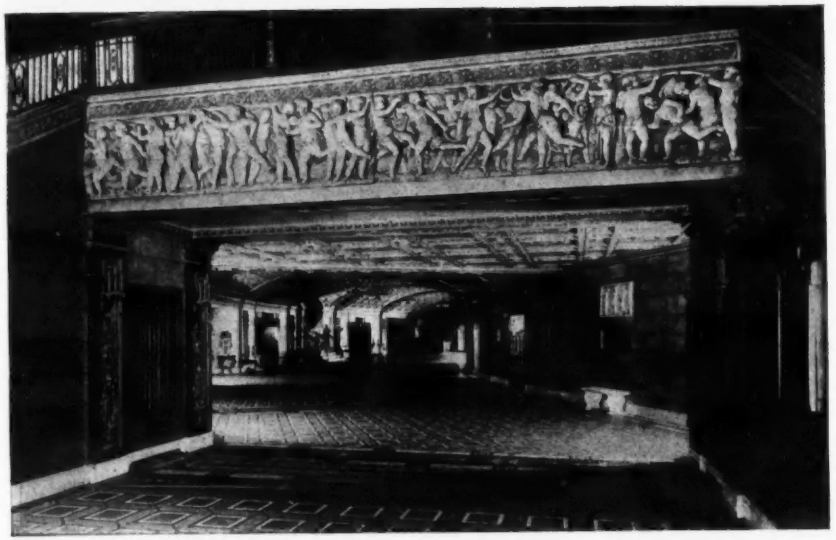
Regent, Westover Road, Bournemouth.]

Side view of balcony. The walls of the auditorium, plain in the lower part, support pilasters, frieze and cornice; above is a coffered dome, 80 ft. in diameter. Between the pilasters of the side walls the surfaces are treated as openings, through which is given a view of a distant landscape. The cinema has twelve exits.



[By W. E. Trent.

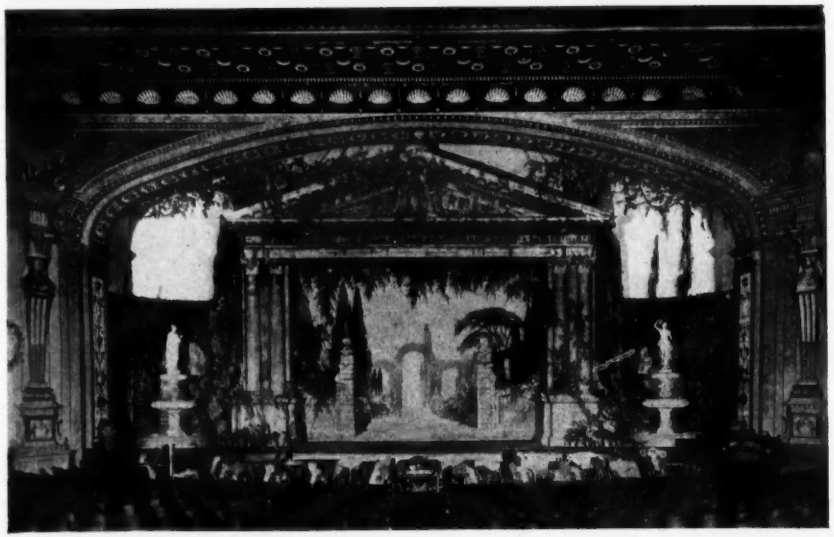
The proscenium. The console of the organ is placed in the centre of the orchestra pit on a rising and falling platform, so that whilst playing a solo the organist may be in full view of the audience. The theatre is used for the display of films and for variety performances. There are over fifteen thousand electric lamps in the building.



The main foyer and promenade bespeak, at once, the vast size and heavily decorated character of this American house. The main staircase leads up to—

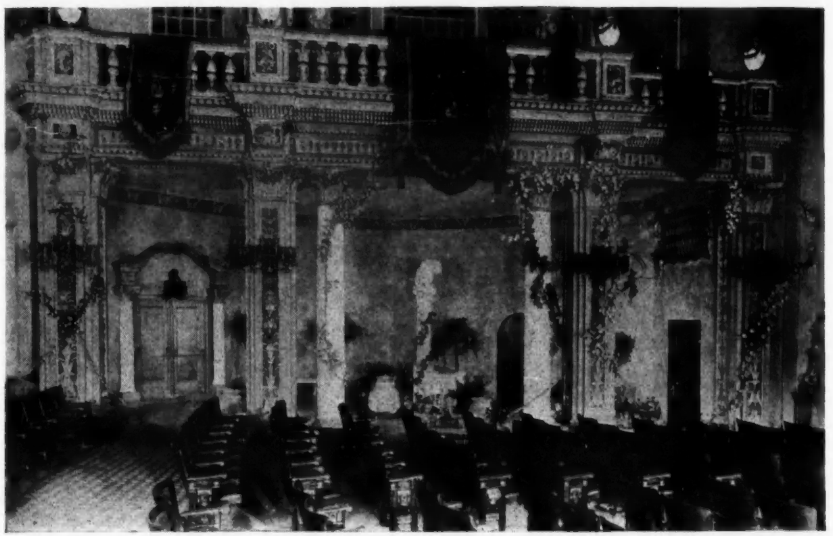


—the upper lounge, where marble and ornamental metalwork abound, and numerous niches and pedestals are contrived for replicas of well-known statues.



Capitol Theatre, Chicago, U.S.A.]

In the arrangement of the stage is focussed the Italian garden idea of interior adornment on the atmospheric plan, which was destined to exercise a dominating influence on this side of the Atlantic.



[By John Eberson.

This side view from the stalls shows the atmospheric theory realized in all the grandeur of which it is capable. The complete wall shows an Italian terrace and villa, with its Florentine fountain in the centre.

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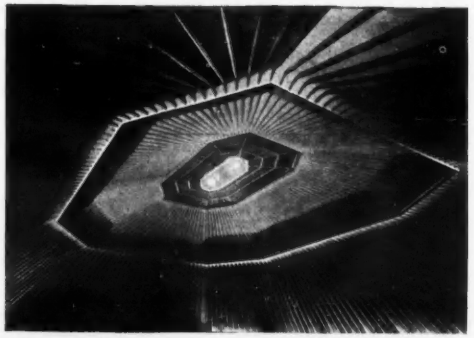
This side view from the stalls shows the atmospheric theory realized in all the grandeur of which it is capable. The complete wall shows an Italian terrace and villa, with its Florentine fountain in the centre.

POINTS : BOX—CEILING—PROSCENIA : IN DETAIL



U.F.A.-Cines, Berlin. [*By Oskar Kauffmann.*

A loggia of boxes, with central pavilion, round the balcony.



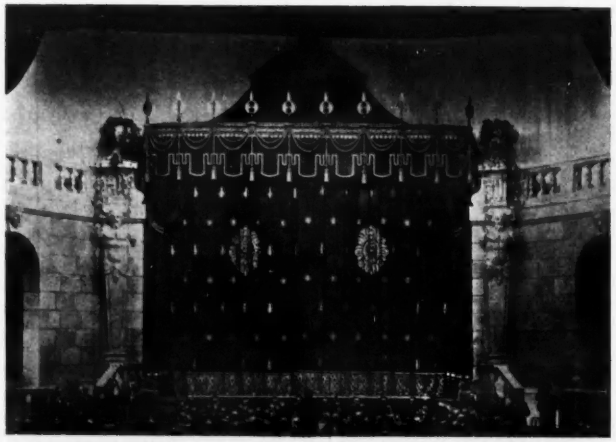
Capitol, Berlin. [*By Hans Poelzig.*

Diminishing and ridged rectangles, resolved in the ceiling light, have an effect of corrugation.



Babylon, Berlin. [*By Hans Poelzig.*

A triptych motive—organ : stage : organ—from Germany.



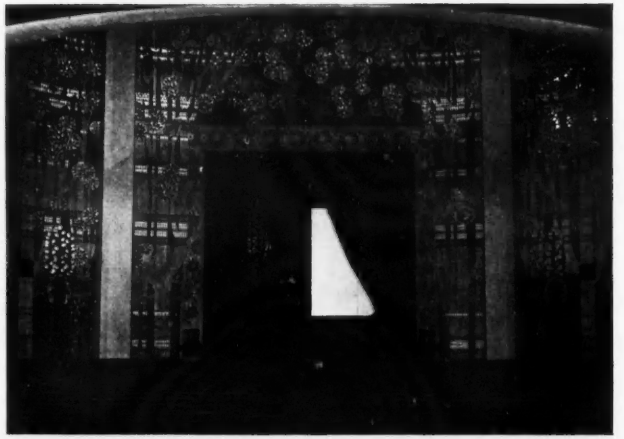
Eastman Theatre, Rochester, U.S.A. [*By McKim, Mead and White.*

Proscenium within proscenium. A panoply and curtain idea in America, used when stage and orchestra are prepared for the movies.



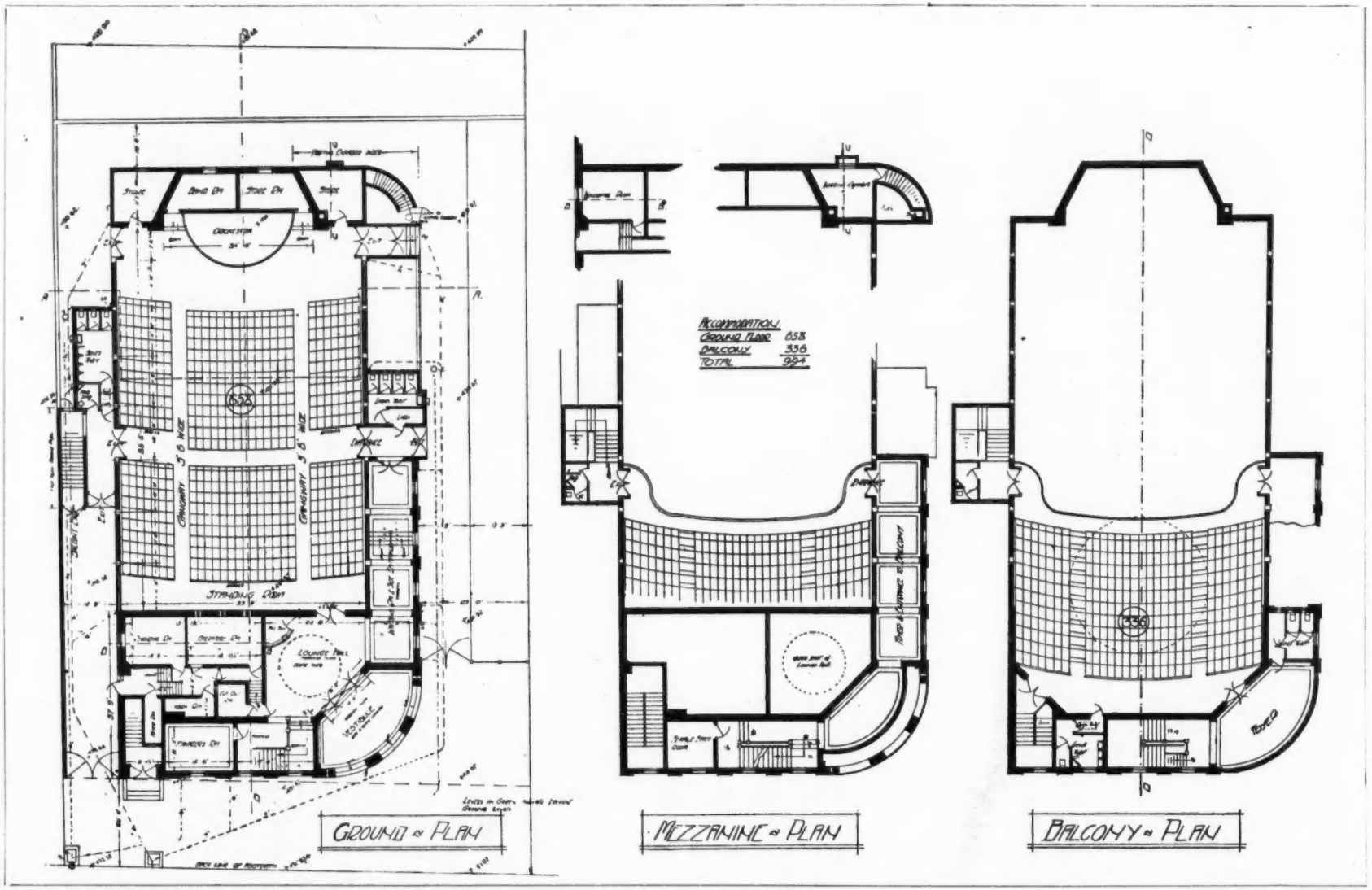
Green's Playhouse, Glasgow. [*By John Fairweather.*

In this theatre, situated in Renfield Street, 50 yards from Sauchiehall Street, and seating 4,270 in three tiers, colonnades of Corinthian columns link upper balcony with proscenium. It will be noted that the ceiling is coffered.



Gambetta Palace, Paris. [*By H. Sauvage.*

A proscenium that is almost no proscenium, so slightly is it indicated amid the patterned decoration of the flush walls.

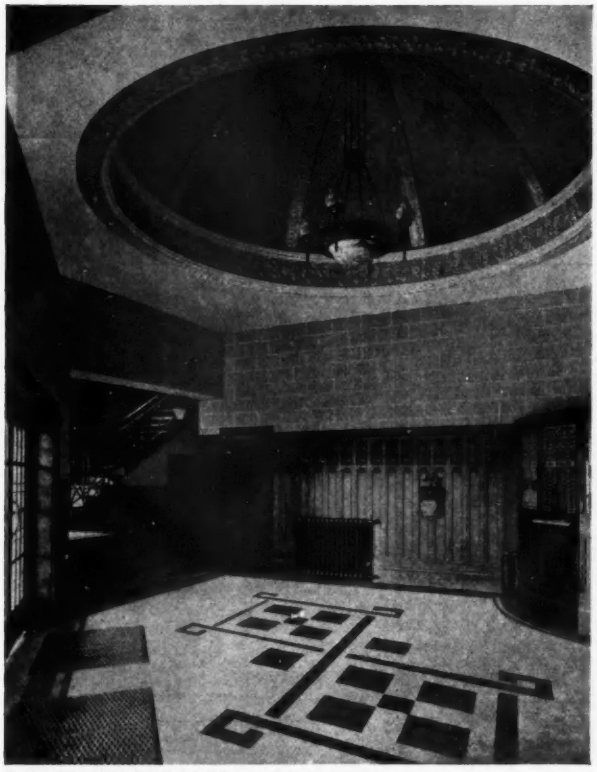


Rialto, Stratford Road, Hall Green, Birmingham.] *[By Hurley Robinson.*

The plans reveal the arrangement of a medium-sized theatre, to accommodate just under 1,000 people, on a rectangular site with a quadrant at one corner. Here is placed the principal entrance, leading direct to the inner lounge hall, or foyer, with pay-box. Thence there is direct access to the stalls floor, with standing room, and also to a waiting-room communicating, in turn, with one of the side entrances. Projection is from the ground floor under the balcony. A side passage on the left of the plan provides an additional exit from the stalls and a separate one from the balcony.

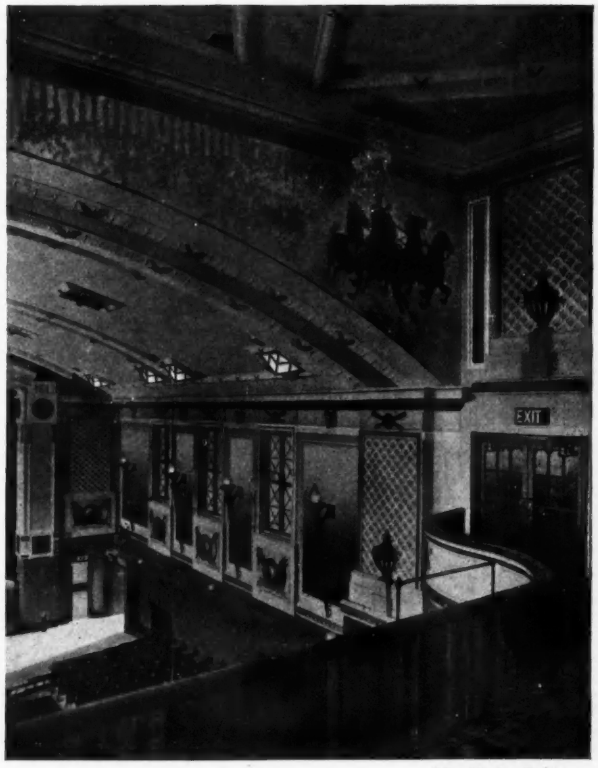


Brick is the medium employed for the exterior, in conjunction with stuc panels, tiled dressings, and a cornice in terra-cotta. In the main entrance feature, on the rounded corner of the site, terra-cotta predominates. As is often the case, the façade bears no relation, in style, to the interior, and does not prepare the patron for its warlike aspect.



Rialto, Stratford Road, Hall Green, Birmingham.]

If the audience does not inhale the atmosphere of refinement on entering this foyer it will not be for want of prevision by the designer. Terrazzo floor, ornately carved oak panels, stained glass, blue dome—all exude it.



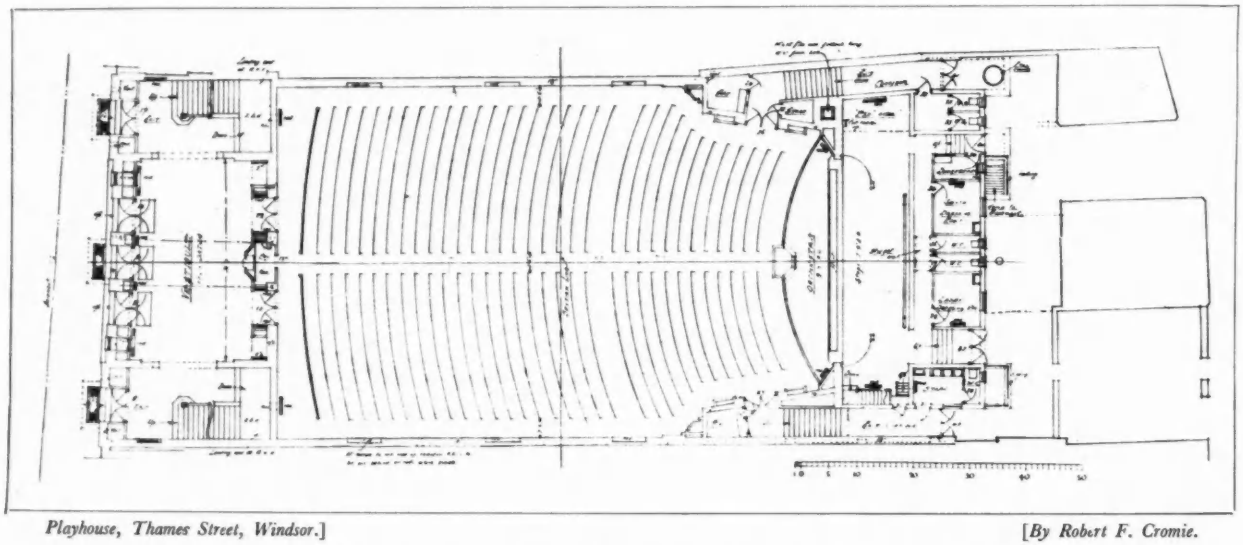
[By Hurley Robinson.

With its trophies of arms and martial emblems, picked out in old gold, blue and green, its flambeaux, its urgent wall paintings of charioteers, set out on a ground of parchment, cream and gold, this is a veritable hall of Valhalla.

RIALTO : BIRMINGHAM



A Georgian style was adopted for the design of this cinema to harmonize with the neighbouring buildings, more especially the Old House, built and occupied by Sir Christopher Wren, which stands immediately opposite. The exterior walls are of dull red bricks, with an enriched medallion cornice, and stone piers having carved caps.



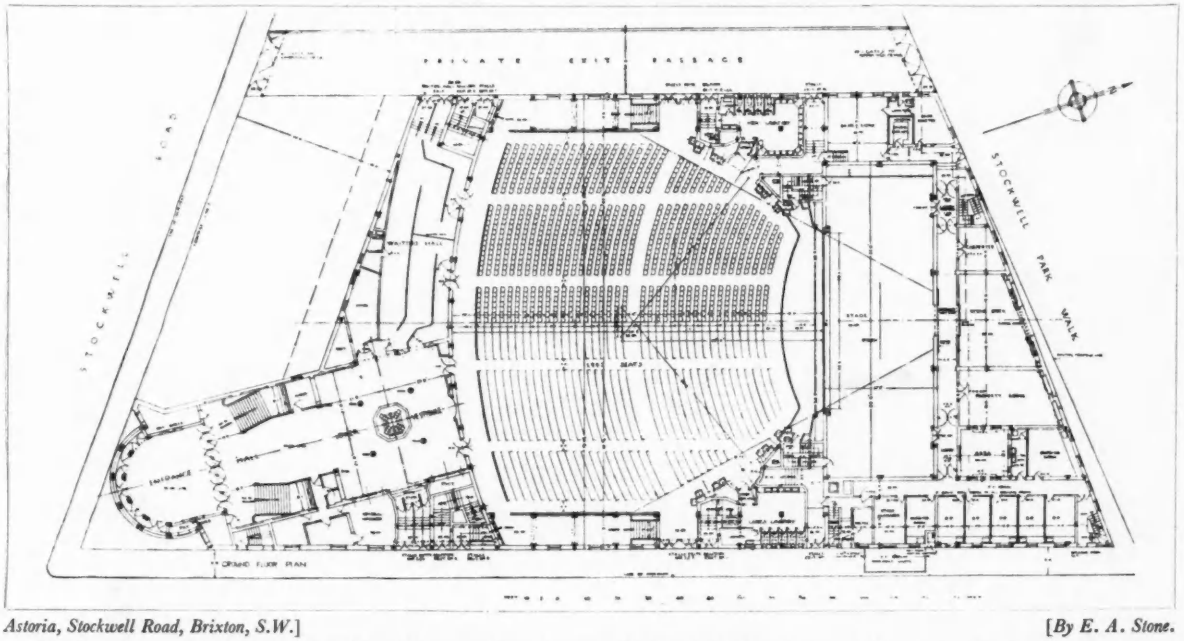
Playhouse, Thames Street, Windsor.] *[By Robert F. Cromie.*

In addition to the accommodation shown on the ground plan, there is a large balcony with dress circle, tea-room, etc. The auditorium is decorated in silver, jade green, and soft tones of apricot ; tableaux curtains and stage setting are in soft sea-green velour ; upholstery is in copper-coloured moquette. Seating accommodation is provided for approximately 1,500.

PLAYHOUSE : WINDSOR



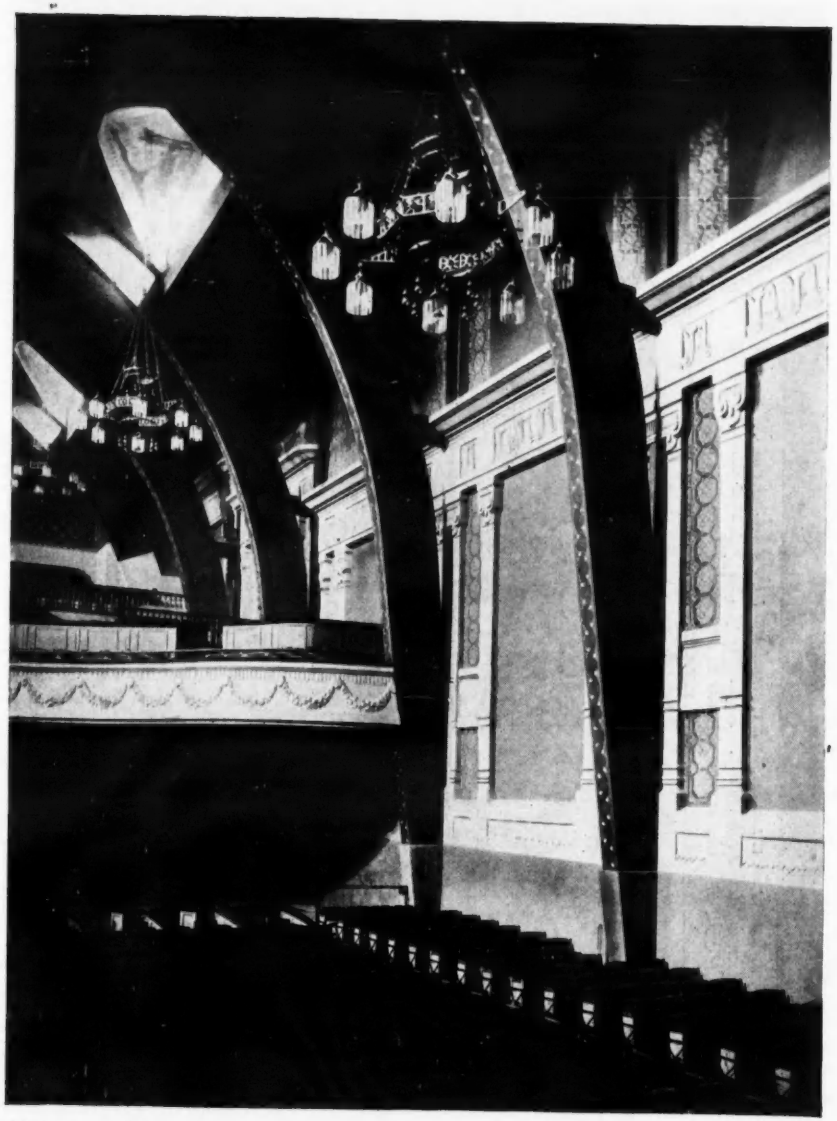
A recent essay in what has become known as atmospheric treatment; the whole of this interior is intended to convey the impression of an Italian garden under a Mediterranean sky. In pursuit of this aim to a point of realism not hitherto attempted in this country, definite built-up forms and plasterwork in heavy relief have been applied throughout the auditorium.



Astoria, Stockwell Road, Brixton, S.W.] [*By E. A. Stone.*

The planning reveals the ingenuity with which an awkward truncated-triangle site has been turned to account to provide a theatre accommodating no less than 4,750 persons. The auditorium and stage, which is fully equipped for modern dramatic needs, occupy the largest square that could be inscribed within it. The planning of entrance hall, lower vestibule, and waiting hall repay study.

ASTORIA : BRIXTON



Montrouge, Paris.]

An interior view, looking towards the balcony. The main members of the structure, flying right across the barrel-roof in a continuous curve, are decorated with repeating patterns that enhance a semi-ecclesiastical effect.



[By L. Oudin.

A progress photograph, taken from a similar point of view while the shell was under construction. The marks of the shuttering are clearly visible on the surfaces of the concrete. Note the clerestory lights.



The main façade is faced in biscuit terra-cotta, the body of the building being in brick. On either side of the main vestibule are pay-boxes; a central short flight of steps leads direct to the stalls floor, while flights of stairs to either side rise to the restaurant and balcony. Three thousand persons are accommodated in the seating, and standing room is also provided.



Commodore, King Street, Hammersmith, W. [*By George Coles.*

Claimed to be the first to be designed with regard to the acoustic problems raised by the talkies, this theatre is funnel-shaped in plan, the side-walls converging towards the stage. The prevailing colours range between biscuit and brown; the three recesses on either side of the stage (which is equipped for "legitimate" plays) are contrived to give the effect of an Italian garden.

COMMODORE : HAMMERSMITH

AUDITORIUM ACOUSTICS

Mr. R. A. Bull, research scientist to a large company manufacturing talkie apparatus, prescribes precautions and cures in the matter of sound transmission.

IN general, the volume and quality of sound heard in any given position in an auditorium is dependent on the degree of effect of the following phenomena :—

a : Reverberation.
b : Interference, echo and sound foci.
c : Resonance

REVERBERATION

The phenomenon of reverberation is a familiar problem in the study of architectural acoustics, and is the persistence of a sound when the source has ceased. It is customary to define the "reverberation period" as the time taken for a sound of specified intensity to die away to inaudibility. This standard intensity is difficult to reproduce in practice with any degree of accuracy, but, fortunately, its use is not necessary. The study of the reverberation period of an auditorium is a matter rather of calculation than of experiment. The method of making this calculation is explained later. Sound, being a source of energy, is indestructible, and would persist indefinitely unless converted into another form of energy, such as heat. Thus, when sound energy impinges on a surface, some of the sound is transmitted through that surface, some is dissipated as heat energy by friction, and some is reflected as sound energy. The relative proportion of transmission, dissipation and reflection is a function of the nature and material of the surface. Dissipation or absorption is controlled by the porosity and flexibility of the surface of the material, and by the flexibility of the mass of the material as a whole.

The majority of normal building materials, which consist of homogeneous or semi-homogeneous rigid structures, and which may have hard polished surfaces (e.g., brick, plasters, tiles, concrete, stone and finished woods), have the quality of reflecting sound to a high degree, and the absorption may only be of the order of 1 per cent. to 4 per cent. When considering reverberation, the effects of absorption and transmission are identical, and the sum of the two is usually termed absorption; transmission, however, may become an important factor in dealing with extraneous noises from an external source.

It follows that if sound of any character is produced within the confined space of an auditorium finished in standard building materials, 96 per cent. to 99 per cent. of the energy which comes into contact with the interior finish is reflected, and the sound will undergo a multiplicity of complex reflections from surface to surface, until the summation of the absorbed energies at each reflection reduces the total energy to below the audibility point.

Since sound is a form of energy, it is interesting to note that sound, once produced in an enclosed space, can only die out through the action of true dissipative forces, such as viscosity, friction, and thermal conduction, and that modification of the waves by irregularities of the walls is, by itself, of no avail. Irregularity of the walls, however, may be instrumental and desirable in avoiding echo effects and in obtaining an even sound intensity distribution.

Reverberation is a feature of auditoriums which is objectionable only when it is excessive. A little reverberation is desirable to satisfy our established tastes and habits, while if in excess, it produces an inarticulate prolongation of the sound which may make speech extremely difficult to understand.

INTERFERENCE, ECHO AND SOUND FOCI

Interference is a phenomenon which is a function of the reflections from the bounding surfaces of an auditorium and may give rise to local positions of high and low sound intensity. Sound travels through the air in the form of waves, and it will be appreciated that at some spot in the theatre it is possible to receive at the same instant the crest of the direct sound wave from the source and the crests of one or more reflected waves. The coincidence of these wave crests will give rise to an increased intensity. Again it will be realized that the crest of a direct wave may coincide with the hollow or trough of a reflected wave (or vice versa) and a position of low intensity results.

It must be emphasized that this condition of interference is dependent on the wave-length of the sound, and hence on the frequency or pitch. At every change of pitch of the sound source, the "interference pattern," or positions of maxima and minima, will change.

The effect of interference in theatres is not often serious, but it is possible to find positions where long or sustained musical notes suffer an increase or a diminution in intensity with a consequent disturbance of the quality.

Echo is a special case of sound reflection in auditoriums and may be extremely disturbing in its effect. It is the reflection of sound from one or more reflecting surfaces, such that the length of the path of the reflected sound results in an appreciable time interval between the reception of the directed and reflected sounds. The ear will detect a reflected sound if its intensity is sufficiently great, and if the time between the reception of the direct and reflected waves exceeds 0·05 sec. This period of 0.05 sec. is approximately equivalent to a distance of travel of 60 ft.

Smooth hard-finished walls, such as the usual plastered type, are excellent regular reflectors of sound, and are consequently likely to produce echoes. It becomes important, therefore, to break up such surfaces so as to produce irregular distribution—this is discussed in greater detail later.

A frequent source of objectionable echo is a plane back wall in an auditorium; this may give a reflection which results in loss of intelligibility in the front rows of a house. Probably the most objectionable form of echo of all is one which is focussed into some portion of the auditorium by a curvature of the walls or ceilings.

Auditoriums having spherical ceiling domes, domes of paraboloids of rotation, and similar forms, may give rise to this form of echo, if the radius of curvature of the surface is sufficiently small to converge the reflected sound waves at a point within the auditorium.

Sound foci may occur in an auditorium due to regular reflection from curved surfaces. If the path of the reflected waves is not sufficiently great to give a perceptible time interval between the reception of the direct and reflected sound, no echo will be heard, but a locality of enhanced intensity may result. Some care and experience is necessary in order to locate the particular portion of the theatre which is responsible for the production of a sound focus, since the path of reflected waves cannot be predicted with the same accuracy as in the case of reflected light.

RESONANCE

Another serious condition, though fortunately not frequently experienced, is resonance. Resonance concerns the vibratory motion of an elastic body, and such a body has a natural frequency of vibration or oscillation, and will respond to a periodic force corresponding to this natural frequency. The air and containing walls of a hall form such an elastic system, and resonance may be produced. The effect of air resonance is confined approximately to a single note and the effect will be to enhance the intensity of this note.

Generally, the fundamental air resonance of an auditorium is too low-pitched to be serious, but it is possible for alcoves or semi-enclosed recesses to have individual resonance effects which are extremely disturbing. A more frequent cause of disturbance is a mechanical resonance of thin wooden boards or panels used in the decorational scheme of the theatre. Such materials, if their natural period of vibration falls within the frequency range of sound produced, will vibrate strongly at this particular frequency, distorting the sound by a pronounced modification of intensity of the one note.

CONTROL OF REVERBERATION

One of the main controlling factors in the acoustics of a building is the magnitude of the reverberation period. Experience has shown that speech is most intelligible when the reverberation period is very short and open-air conditions are simulated—i.e., conditions where there is complete absorption and no reflection. For music, however, a slightly longer reverberation period appears to be desirable.

The reverberation period for any auditorium is given by the expression :

$$T = \cdot 05 \frac{V}{A}$$

Where T is the reverberation period in seconds for a standard initial sound intensity, V is the volume of the theatre in cubic feet and A is the total absorption. The latter quantity can be expressed as :

$$a_1 p_1 + a_2 p_2 + a_3 p_3 + \ldots$$

where the a's are the total exposed areas of any given material and the p's are the appropriate coefficients of absorption for the material. The expression for T demonstrates that the decay period is independent of the shape of an auditorium, and is independent of the distribution of the absorbing materials. It thus follows that an excessive reverberation can be reduced by introducing sound-absorbing materials, and the effect of these materials will be independent of their location.

It must be appreciated that the audience is a varying factor, and has a considerable effect on the time of reverberation. It has been estimated that an average member of an audience is equivalent to 4·7 sound-absorbing units. Since the size of an audience is always an unknown factor, it is desirable to reduce its effect as much as possible, and this may be done by the use of upholstered seats, carpets, and sound-absorbing material, so that the reverberation period with zero audience is within reasonable limits.

An important factor, and one that must be known when correcting or designing the acoustics of an auditorium, is the time of reverberation that will give the best results. Experience with a number of existing auditoriums of acceptable acoustic quality makes possible the formulation of the following table, in which the acceptable standard reverberation time and the corresponding number of units of absorption required to give that time, are given for auditoriums of different volumes :

Volume in cub. ft.	Reverberation period in secs.	Units of absorption.
8,000	1·1	340
10,000	1·125	420
20,000	1·24	750
40,000	1·35	1,500
70,000	1·45	2,400
100,000	1·51	3,100
200,000	1·59	6,000
400,000	1·81	11,000
700,000	1·97	18,000
1,000,000	2·04	25,000

This table is based on the assumption that two-thirds of the audience are present. These figures give the desired reverberation time for one frequency only—namely, 512 cycles per second, or a note whose pitch is one octave above middle C. The reverberation time for any other pitch will be different, since in nearly all materials the amount of sound absorption will vary with the frequency. The single frequency calculations, however, can give a reasonable indication of acoustic performance.

Again, the figures given in the table are not to be regarded as rigid. Auditoriums are known which vary from these figures by several tenths of a second and yet give satisfactory results. For talking film work, however, it is desirable that these figures be regarded as maximum values.

EXAMPLE OF ACOUSTIC CORRECTION

The procedure may be followed in analysing the acoustics of an auditorium, and the prescription of the means for securing the best effect is probably most easily demonstrated by an example. We will assume that the design of a theatre having a seating capacity of 2,000 and a total volume of 400,000 cubic feet is under consideration. We will further assume that the internal finish of the theatre has been tentatively decided. An analysis of the areas of different materials and their corresponding absorption is made below :

Material.	Area, sq. ft.	Absorption coefficient.	Units of absorption.
Hard plaster	32,100	0·025	803
Wood sheathing	11,373	0·06	682
Varnished wood	804	0·03	24
Glass	500	0·027	13·5
Metal	744	0·01	7·4
Ventilators	280	1·00	280
Seats (wood)	2,000	0·1	200
Carpet	4,473	0·03	134·0
		Total	2,144
Average audience 1,340	1,340	4·6	6,160
Maximum audience 2,000	2,000	4·6	9,200

(Note that a value of 4·6 absorption units per person is used and not 4·7, since 0·1 has already figured for seats.)

Using the expression $T = \cdot 05 \frac{V}{A}$, we find the following :

T for no audience 9·3 secs. ($A = 2,144$).

T for two-thirds audience 2·4 secs. ($A = 8,304$).

T for full audience .. 1·675 secs. ($A = 11,344$).

From the first table it is seen that the optimum reverberation period with two-thirds audience for this volume is 1·81 secs., and hence the hall will be excessively reverberant. To approach the optimum conditions, we must introduce into the auditorium a further 2,696 units—*i.e.* (11,000—8,304) units.

We can start by replacing the wood seats by upholstered chairs and the cork carpet by a heavy lined carpet. The effect of these changes will be as follows :

Absorption due to upholstered chairs = 2,000 (2·0—0·1) = 3,800 units.

Absorption due to carpet = 4,473 (0·20 — 0·03) = 755 units.

Thus we have increased the absorption for zero audience by 4,555 units and the total absorption is now 6,700 units.

For an average audience of 1,340, the total absorption is : 6,700 + 1,340 (4·7 — 2·0) = 10,330

and the corresponding reverberation period will be 1·935 secs.

We have approached a little nearer the optimum condition, but it is still desirable to introduce (11,000—10,330) = 670 units. Suppose we decide to employ a corrective material having an absorption

coefficient of 0·335, the area required will be $\frac{670}{0·335-0·025} = 2,160$ sq. ft.

This might be introduced in panels in the ceiling and the back walls; the latter panels will have the desirable effect of reducing back wall reflection.

The times of reverberation of our corrected hall will now be :

T for no audience .. 2·73 secs.
T for two-thirds audience 1·81 secs.
T for full audience .. 1·57 secs.

It will be seen that we have reduced the effect of the audience very considerably, but the reverberation period for small audiences will still be slightly excessive for talking-film work and it might be desirable to introduce a little more absorbing material. It would have been better to have considered the reverberation period for a number of frequencies at intervals over the musical scale. This would necessitate a complete knowledge of the absorption-frequency characteristics of all materials in the auditorium, but though these calculations are desirable, yet, in general, it is sufficient to consider only the mean frequency of 512 cycles per second.

CORRECTIVE MATERIALS

At the end of this article is a list of the coefficients of sound absorption of various materials and individual objects. An open window is considered an ideal absorber, since energy passing through it is lost in space, and a square foot of window is hence taken as the unit of absorption.

Among the materials that are effective in absorbing sound, and that may be used in auditoriums, are carpets, rugs, heavy curtains, thick upholstery, felt, flax compounds, wool, cotton, etc. Felt has been used extensively in adjusting the acoustics of halls, and is generally installed in panels against a wall or ceiling surface. Then for decorative purposes the panels are covered with a thin porous cloth mounted about an inch distant from the felt. Certain wood pulp boards are also frequently used. They have a comparatively low coefficient of absorption, but have the advantage that they can be made to have an attractive appearance.

There are certain sound-absorbing artificial bricks which can be incorporated in the masonry. They have the advantage of being fireproof. Acoustic correction has been obtained in some cases by constructing grilles, so that the sound passes through the grilles and is absorbed in the space behind. This method is desirable occasionally, in order to maintain the decorational treatment of the auditorium.

A feature which has not received sufficient attention in the choice of a sound-absorbing material is the variation of absorption with the pitch of the sound. The absorption figures given in the table are for a fixed frequency of 512 cycles per second. For notes of a higher pitch the absorption may be increased or decreased, depending on the material. The majority of absorbing materials, including a member of an audience, absorb the upper notes to a greater degree than the lower notes. The effect of this may be to produce an auditorium which is dead, and the lower notes will appear to predominate.

VENTILATION EFFECTS

It is possible for the nature of the ventilation of a theatre to have an effect on the prevailing acoustic conditions. Local variations of temperature, such as a warm column of air rising from localized floor ventilation ducts, may give rise to reflection and diminished intensity. A cylindrical column of warm air will act as a diverging lens, with a consequent diminution of intensity received through it, and there will be reflection at the junction of the cool and warm bodies of air. These effects, however, though occasionally met, are rarely serious except in halls having a long reverberation period. A condition of homogeneity of temperature is a desirable feature, and the effect of a general rise or fall in temperature is entirely negligible.

ACOUSTIC DESIGN OF AUDITORIUMS

In the design of auditoriums there are three broad factors that should be considered :

1 : Volume;
2 : Position and shape of walls;
3 : Reverberation period.

The volume of the room should be in proportion to the intensity of the sounds generated in it. Thus, an auditorium designed for the rendering of heavy orchestral works would be quite large in order that the intensity should have sufficient space for proper distribution. A hall designed for speaking only, where the intensity of sound is fixed by the voice, should be very much smaller. An intermediate volume should be chosen where both music and speaking will take place.

For talking-film work a new consideration is introduced; here the music of a medium-sized orchestra is reproduced at an intensity comparable with the original, but the reproduction of speech is frequently at an intensity greater than the original. Thus halls of an intermediate volume are desirable for good sound distribution.

The second factor for consideration in the design is the shape and position of the walls. It is essential that these be arranged so as to avoid or minimize the possibility of echo. Plain walls and a general rectangular shape are to be preferred; there are many classic examples of bad acoustics due to curved walls and domed ceilings. It is useful, when laying out the wall dispositions, to consider possible sound reflections by a geometric study of the main sections of the room, and to trace the path of the sound after reflection from various walls.

The third important factor is reverberation : here, again, special considerations are introduced by talking films. Owing to the fact that speech is reproduced at an intensity higher than normal, the reverberation period should be lower than that desired for speaking. Hence it is desirable that the reverberation period be slightly lower than the average figures given in the table.

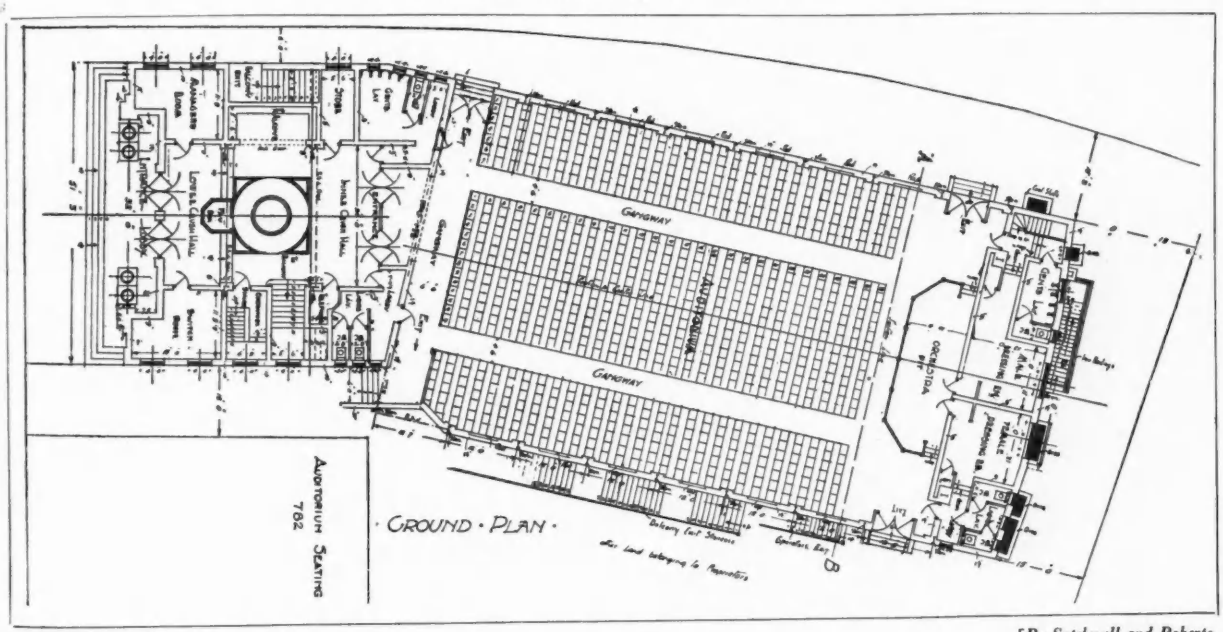
Thus the size, shape and reverberation of the auditorium are of primary importance, and upon these depend the acoustic properties. There are other features, however, which must be considered, namely ventilation, possible resonance in alcoves, recesses, boxes, etc., and the size and shape of the stage opening. The normal theatre frequently has stage walls of brick or other standard building material and a hard wood stage. Speakers and musicians may find a reassuring effect from the presence of the resultant local reflections, but these reflections are objectionable when the theatre is used for talking films and it is desirable to have the stage and stage surrounds damped. Occasionally serious reflection troubles are experienced from the inner side of the proscenium arch, especially in a design where the proscenium arc opening is small, and the back st space is large. The local reverberat of a stage may nullify the effect of auditorium having, otherwise, good acoustics. Extensive unbroken back wall areas are frequently objectionable, and may be contributing factors to a high reverberation period and in some cases may give rise to echo effects. Large or extensive windows and smooth panes of glass, as installed in the rear of orchestra seats, may also cause troublesome reflections.

The interior finish should be planned with both echo and reverberation in mind. A liberal use of coffering on ceiling and walls should effectively prevent echoes and give a good distribution. The dimensions which should be given to such coffering are not a matter of taste or accident. If the irregularity or coffering is small compared with the wave-length of a sound, there will be little dispersive effect produced, and the wave will undergo approximately plane reflection. If, on the other hand, the coffering is large, the smooth spaces inside the coffering may act as regular reflectors. The coffering should consist of depressions about four feet square, and contain a

(*Concluded on page 779*)



A view of the proscenium, looking from the balcony. The stage is adapted for variety and other performances as well as the showing of films. Beneath the stage are dressing-rooms. The lighting fittings are elaborately designed and enhance the architectural treatment of the auditorium.



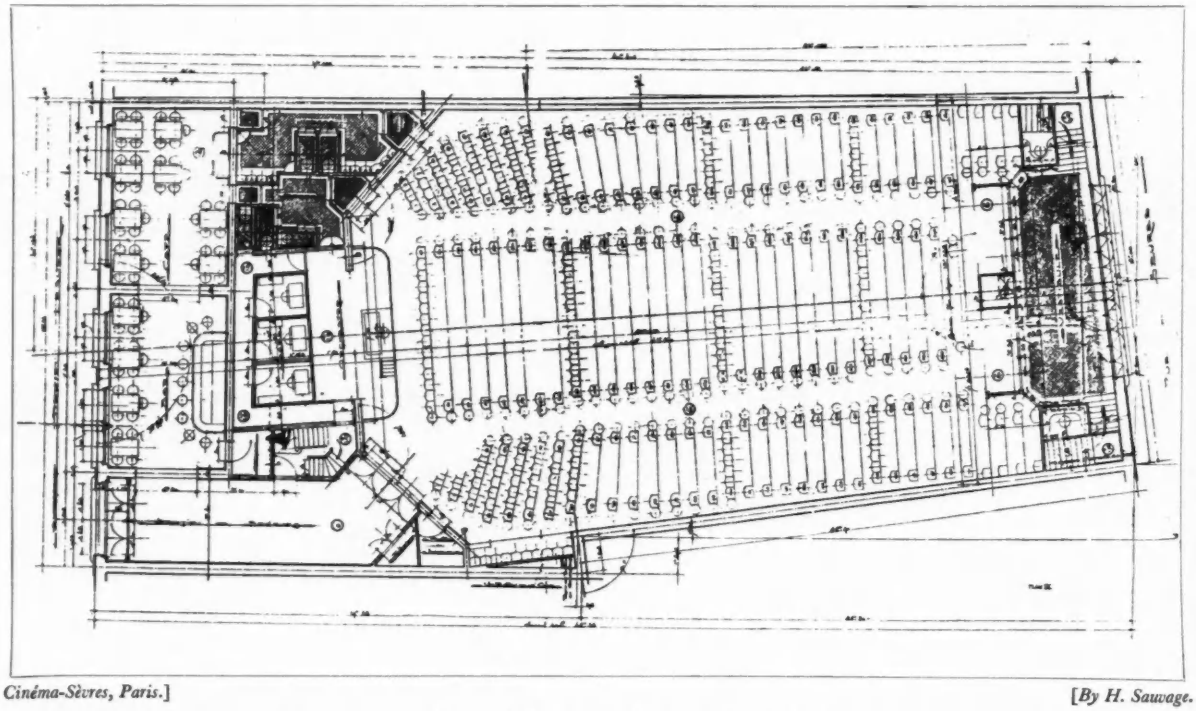
Adelphi, Coventry Road, Hay Mills, Birmingham.] [*By Satchwell and Roberts.*

The main entrance in Coventry Road leads to a lower crush hall in which is the pay-box. Beyond, to the left, is an alcove, leading to an inner crush hall and thence to the auditorium. Stairs to the right of the pay-box rise to the balcony. Accommodation is provided, on the ground-floor alone, for nearly 800 persons.

ADELPHI: BIRMINGHAM



The view of the house from the stage serves to illustrate the thesis that the decoration should be concentrated at the proscenium arch and that the rest of the theatre should be left comparatively bare. Although there is no ornament, except for the plain row of small panels at the top of the balcony parapet, and for the few mouldings which mark the base of the parapet and the top of the dado to the auditorium, the composition is full of interest, owing to the contrasting shapes of the curves of the balcony and ceiling.



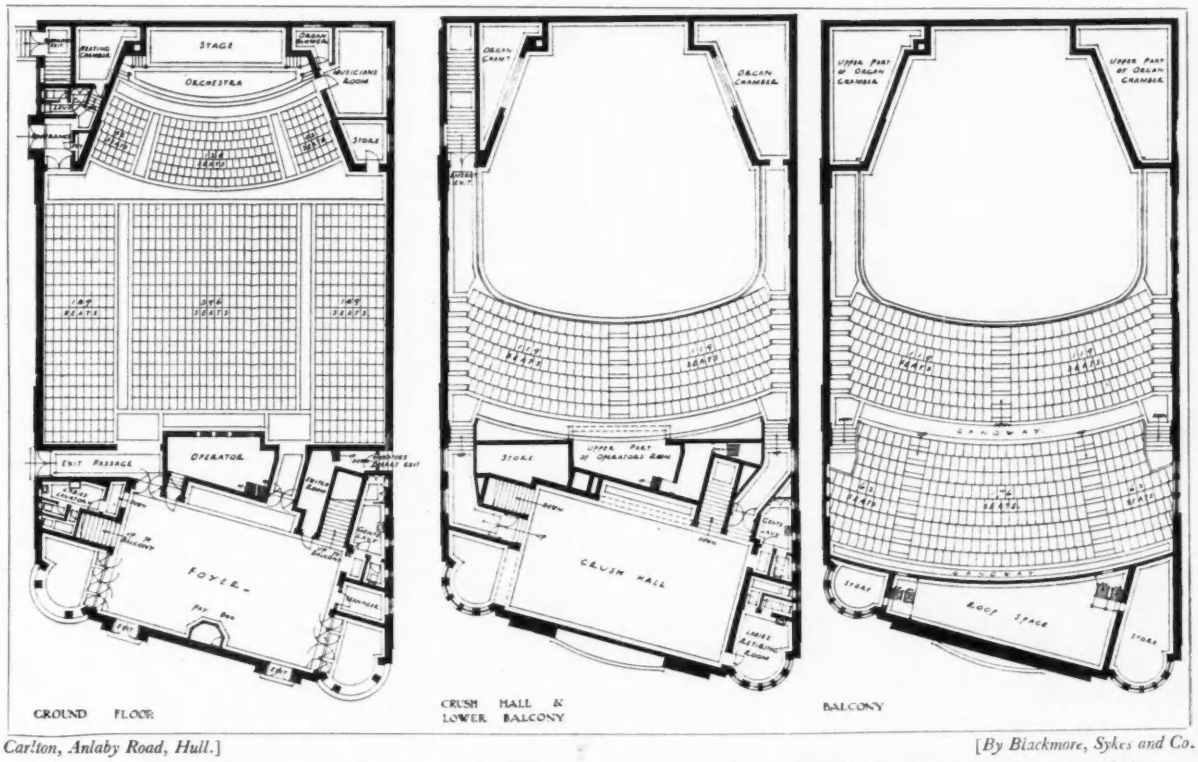
Cinéma-Sèvres, Paris.] *[By H. Sauvage.*

The plan shows a convenient arrangement whereby full advantage is taken of a double frontage to provide a restaurant as well as the principal exit behind the stage. An ample foyer is included, at the entrance from the Rue de Sèvres.

SÈVRES : PARIS



Seating is for 1,600. The centre of the saucer-shaped dome over the auditorium is finished with a large grille, through which fresh air is admitted when the sliding roof is opened. In this dome are over 250 concealed coloured lights. Further air extraction grilles are provided in the ceiling.



Carlton, Anlaby Road, Hull.] [*By Blackmore, Sykes and Co.*

The principal entrances are through two corner vestibules, entered from Anlaby Road, which lead to a spacious ground-floor foyer. At balcony level is a crush hall accommodating 500 persons. The orchestra is raised above the general floor level of the auditorium, instead of being placed in the customary pit.

CARLTON : HULL



U.F.A. Theater-Palast, Magdeburg, Germany.]

A picture-frame simplicity is adopted as a setting for the screen. The eye is led to it by the slightly splayed and lightly decorated organ grilles on either hand, the usual proscenium arch and ornamentation being conspicuously absent. The rectangular patchwork-quilt wall-decoration is subdued, and gives sufficient interest without distraction. The problem of adapting the dado to the raked floor, however, is not very happily solved.



[*By Fritz Wilms.*

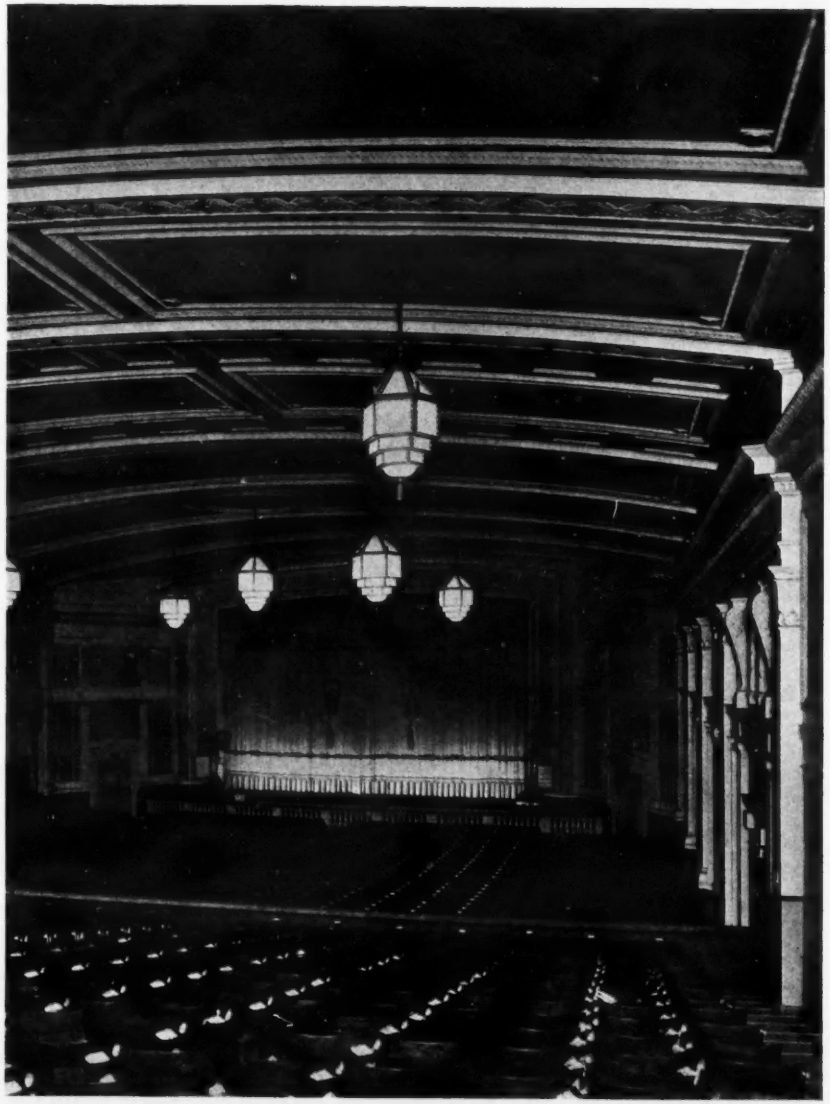
From this aspect of the balcony it will be seen that the patchwork panel idea of the walls has its complement in the ceiling treatment. The recessed bulkhead lighting is also interesting. At the top is seen a corner of the projection-gallery, which depends from the roof and, with another and larger rectangular bulkhead light on its soffit, is made a prominent feature of the interior composition.

U.F.A. : MAGDEBURG



Carlton, Upton Park, E.]

The façade is designed in the Egyptian style, and is executed in white and coloured faience. The spacious vestibule contains display windows of the shops which flank the building, and is paved throughout with Roman stone and red marble. The walls and ceilings of the vestibule are in the Renaissance style.

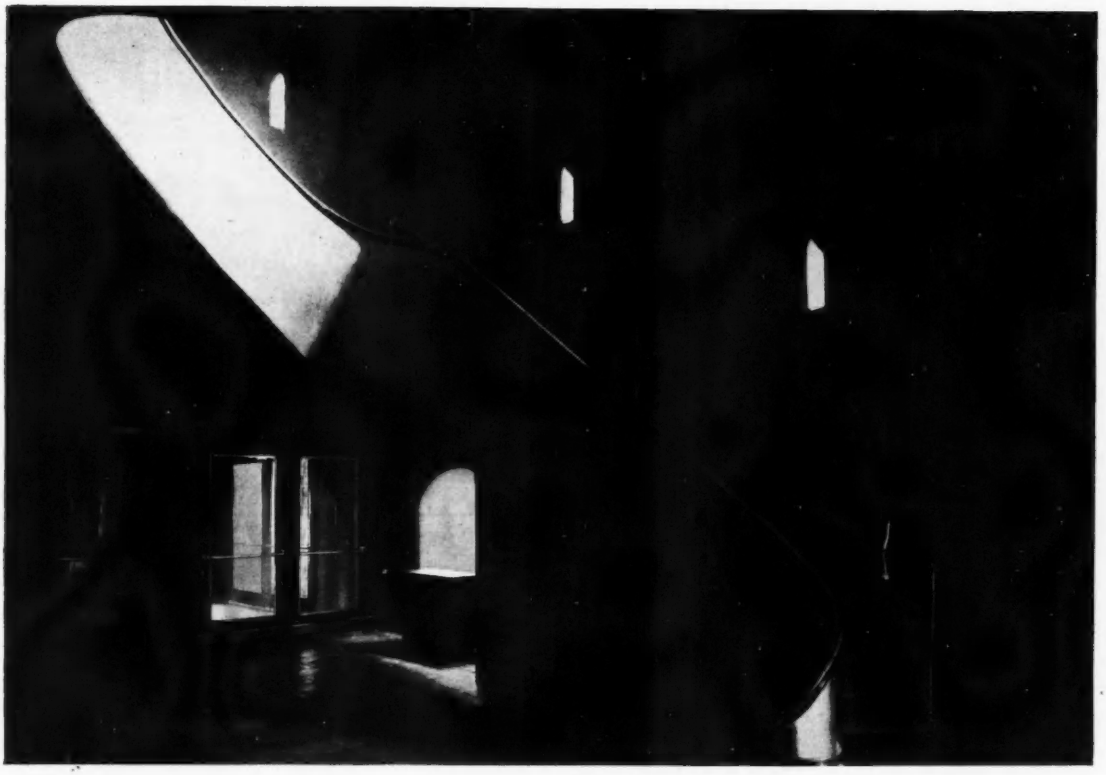


[By George Coles.

The auditorium, looking towards the proscenium. Like the entrance vestibule, it is in the Renaissance style. An amber-coloured lighting effect is obtained from bronze and glass electroliers. The whole of the upholstery is executed in gold, and royal-blue carpets have been laid throughout the building. Seating is provided for 2,500.



The interior owes much to a very novel form of electric lighting, which possesses the artistic merit that the central electrolier, instead of being too solitary a feature, is supplemented by a number of subsidiary lights which enable the ceiling as a whole, as it were, to participate in the act of illumination, like the moon and the stars in the firmament.



Deli, Breslau, Germany.] [*By Hans Poelzig.*

The staircase leading up from the vestibule follows the modern fashion of dispensing with balusters and substituting for them a solid sloping parapet topped with a hand-rail, the elegant curves of which constitute the main element in the composition. The lighting, in the form of miniature windows, is as highly effective as it is unusual.

DELI : BRESLAU



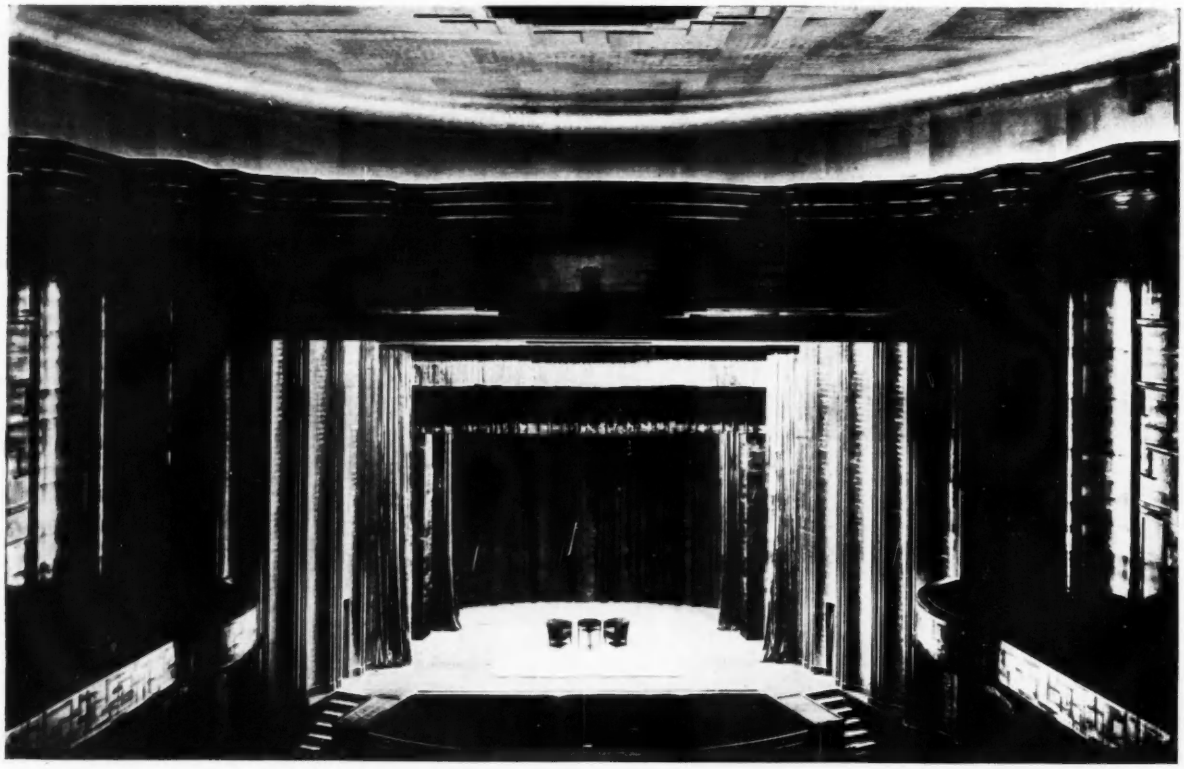
In this building the elevation was designed primarily as a neutral background for neon-lighting effects at night-time. But in the day-time also the façade compels attention, for it has the merit which is derived from orderly composition. A series of shops are provided on either side of the central main entrance.



Capitol, Berlin.] *[By Hans Poelzig.*

The contrast between the interior lines of the building and those of the ribbed ceiling, set back in a bay of which may be seen the projection apertures, strikes one as somewhat harsh. It is unfortunate that these elements are not more harmoniously interrelated, for individually they show a masculine vigour of design. The colours are yellow and deep violet.

CAPITOL : BERLIN



An example of unusually elaborate treatment of the proscenium frame. There are three sets of curtains, in gold, Titian red and black respectively, in addition to an intermediate one of silver-grey. The general decorative scheme of the house is carried out in burnished silver and gold, illuminated by a changing colour-lighting system.



Capitol, Breslau, Germany.]

The cloak-room vestibule has silver-coloured walls and ceiling, with copper-coloured carpets and silk-velvet hangings. The chairs are in light red. Direct lighting is white; indirect, yellow.



[By Friedrich Lipp.

Part of wall and proscenium, showing the panelling and deeply-cut mouldings. Metallic tints predominate, and concealed polychrome lighting is fitted. The horns of the balcony reach to the proscenium.

CAPITOL : BRESLAU

succession of steps totalling a depth of perhaps 8 or 10 inches.

These dimensions will give the best average dispersive effect.

A feature which is assuming considerable importance in talking-film reproduction is interference due to extraneous noises. These extraneous noises may originate in the mechanical or electrical equipment of the theatre, or in the rush of air through ventilating ducts or grilles, or in ventilating fans. It may enter the theatre from outside sources, such as street traffic, or railways, or it may be caused by groups of people in the foyers and lobbies awaiting admittance. The design of new theatres for talking-film entertainments should be of such a nature that any extraneous noise is reduced to a minimum.

TABLE OF SOUND-ABSORPTION COEFFICIENTS

Average values at 512 cycles (= 1 octave above middle C).

CONSTRUCTION SURFACES	per sq. ft.
Brick wall	·032
Brick wall (painted)	·017
Concrete	·015
Cork tile	·03
Glass	·027
Linoleum	·03
Marble	·01
Metal	·01
Plaster (wood or metal lath)	·033
Plaster (on tile)	·025
Stage openings (as generally arranged for cinema work)	·25
Ventilators (use percentage of open space).	
Window	1·00
Wood, varnished	·03
Wood, unfinished	·06
CORRECTIVE SURFACES	
Artificial stone, tile or brick	·36
Carpets, unlined	·15
Carpet, cork	·03
Carpets, lined	·20–·25
Acoustical wall boards	·31–·70
Curtains—Cretonne	·15
„ Chenille	·23
„ Velour (⅓ gather), heavy	·60
Felt, hair or asbestos, 1 in., bare	·60
Felt, hair or asbestos, 1 in., perforated membrane	·67
Felt, hair or asbestos, ½ in., perforated membrane	·40
Matting (cocoa or grass) lined } Matting (rubber)	·17
INDIVIDUAL OBJECTS	each
Audience	4·7
Seats, wood	·10
Seats, wood, with padded leather seat and back	1·00
Seats, spring seats and back, on wood, leather covered	1·30
Seats, spring seats and back, on wood, plush covered	1·50
Seats, spring seats and back, plush covering over back	2·00
Seats de luxe, very heavy hair cushions and plush	2·50
Settees (use coefficient for equivalent number of seats).	

The above article has been contributed by R. A. Bull, B.Sc., Engineering Development (Acoustics) Dept., Western Electric Co., Ltd.

THE CINEMAS ILLUSTRATED

Following is a list of the specialists, general contactors, and some of the sub-contractors for the cinemas illustrated in this issue :—

Trocadero, Liverpool (page 713). General contractors, Wm. Tomkinson and Sons. Sub-contractors : Concrete, Ltd., reinforced concrete; Leeds Fireclay Co., Ltd., terra-cotta; Banister, Walton & Co., Ltd., structural steel; John Stubbs and Sons, marble work and tiles; Saunders and Taylor, central heating and ventilation; Musgraves, Ltd., sanitary fittings; John Tanner and Sons, fibrous and decorative plaster; Automaticket, Ltd., pay-box equipment.

Welwyn Theatre (pages 700, 714-5). Specialists : Hope Bagenal, acoustics. W. W. Nobbs, heating and ventilating engineer. General contractors, Welwyn Builders, Ltd. Sub-contractors : Allom Bros., electric flood-lighting fittings, auditorium and vestibule; G. N. Haden and Sons, heating and ventilating; Phillips Lamps, Ltd., outside electric sign; Mather and Platt, Ltd., fire extinguishers; Merryweather, Ltd., fire hydrants; Synchronome Co., clocks; Sturtevant Engineering Co., vacuum cleaning plant; A. D. Dawnay and Son, Ltd., constructional steel work; Ragusa Asphalte Co., asphalt; Langleys, Ltd., tiles (roofing); Cashmore Art Workers, metal grilles; Henry Hope and Sons, outside poster frames; Venesta, Ltd., plywood; Charles Walker, terrazzo.

Twickenham Cinema (pages 719-21). General contractors, J. T. Mears, Ltd. Sub-contractors : G. N. Haden and Sons, Ltd., heating and ventilation; Locke and Soares, Ltd., electric lighting; Stratford-on-Avon Guild, Ltd., fibrous plasterwork; Plastering, Ltd., plain plasterwork, together with external stucco; Campbell Bros., Ltd., painting and decoration; C. Harvey & Co., electric light fittings; Paint-spray, Ltd., external painting to stucco; Mather and Platt, Ltd., fire appliances; Diespeker & Co., Ltd., and Art Pavements and Decorations, Ltd., precast terrazzo steps; F. Jukes, and Comyn Ching & Co., Ltd., decorative metal-work; Henry Hope and Son, and Morris-Singer Co., metal windows; Luxfer, Ltd., canopy on front; British Vacuum Cleaner and Engineering Co., Ltd., vacuum installation; Superlite Cinema Screen Co., screens.

Imperial Institute (page 725). General contractors, F. and H. F. Higgs, Ltd. Sub-contractors : Richard Crittall & Co., Ltd., central heating and ventilation: Grierson, Ltd., electric wiring; Best and Lloyd, Ltd., and Norman Baynton Company, Ltd., electric light fixtures: Frank Burkitt, automatic shutters for operating chamber; W. Aumonier and Son, fibrous plaster.

Plaza, Liverpool (pages 726-7). General contractor, John Rimmer, who was also responsible for the excavation, foundations, reinforced concrete, and joinery. Sub-contractors : Penmaenmawr and Trinidad Lake Asphalt Co., Ltd., asphalt; Ravenhead Sanitary Pipe and Brick Co., Ltd., bricks; Liverpool Artificial Stone Co., artificial stone; Redpath, Brown & Co., Ltd., structural steel; Diespeker & Co., Ltd., partitions and stair-treads; Sulzer Bros., central heating, ventilation and boilers; Berkeley Electrical Engineering Co., Ltd., electric wiring, electric light fixtures, bells, telephones and signs; Crittall Manufacturing Co., casements; J. B. Johnson & Co., plaster and decorative plaster; J. Stubbs and Sons, marble and tiling; Hampton and Sons, Ltd., furniture; Automaticket, Ltd., pay-box equipment.

New Palace, Edinburgh (page 731). Contractors : Redpath, Brown & Co., Ltd., structural steel and iron staircases; J. and J. Johnston, fireproof construction; Wm. Briggs and Sons, Ltd., roofing felt; Toffolo, Jackson & Co., patent flooring, stairtreads and marble; Sturtevant Engineering Co., Ltd., ventilation; Fredk. Braby & Co., Ltd., casements; Automaticket, Ltd., pay-box equipment.

Carlton, Haymarket (pages 734-5). General contractors, Arthur Vigor, Ltd. Sub-contractors : F. H. Pride, lay lights; Expanded Metal Co., Ltd., expamet work; J. W. Gray and Sons, lightning conductors; Thos. Faldo and Sons, Ltd., asphalt; Davey, Paxman & Co., boilers; General Electric Co., Ltd., Cyclorama and Schwabe-Hasait lighting apparatus; Carrier Engineering Co., ventilation; John Bolding and Sons, sanitary fittings; J. A. King & Co., Ltd., pavement lights; G. Jackson and Sons, Ltd., decorative plaster; Fenning & Co., Ltd., marble; Waring and Gillow, Ltd., textiles and furniture; Pollard & Co., pay boxes; Waygood-Otis, Ltd., lifts; Moreland, Hayne & Co., structural steel; Carter & Co., Ltd., mosaic work; Alfred Goslett & Co., mirrors and glazing; Marbello, Ltd., patent flooring; Young, Austen and Young, heating and hot water; Sturtevant Engineering Co., Ltd., vacuum-cleaning installation; E. J. and A. T. Bradford, stone carving; Comyn Ching & Co., Ltd., door and window furniture; Helliwell & Co., casements; Mather and Platt, Ltd., automatic sprinklers; Light Steelwork, Ltd., iron staircases.

Regent, Bristol (pages 738-9). General contractor, Frank Wilkins. Sub-contractors : G. N. Haden and Sons, Ltd., heating and ventilation; John Lysaght, Ltd., steelwork; H. H. Martyn & Co., Ltd., fibrous plaster work, bronze doors and decoration; Siegwart Fireproof Floor Co., reinforced floors; Marble Mosaic Co., Ltd., marble, terrazzo and tiling; Gardiner, Sons & Co., Ltd., wrought-iron canopy, fire escape staircases, and wrought-iron balustrades; Crittall Manufacturing Co., Ltd., bronze casements; N. F. Ramsay & Co., ironmongery; Brunswick Metal Casement and Engineering Co., steel casements; A. S. Scull and Son, Ltd., plumbing and sanitary work, and fire hydrants; The Luxfer Co., Ltd., lantern lights; James Gibbons, Ltd., floor springs; George Parnall & Co., chocolate kiosks, etc.; The Trussed Concrete Steel Co., Ltd., reinforced concrete beams and piers to river wall; William Harland and Son, paint; F. H. Pride & Co., electric fittings; Automaticket, Ltd., pay-box equipment; "Wurlitzer," organ.

Davis, Croydon (pages 740-1). Quantity surveyor, J. H. Dunt, F.S.I. General contractors, Grace and Marsh, Ltd. Sub-contractors : London and Wales Steel Construction Co., Ltd., steelwork; Independent Sprinklers, Ltd., hydrants and sprinklers; Wainwright and Waring, Ltd., and Carton and Thorne, Ltd., ornamental iron work and glass; Medway's Safety Lift Co., passenger lift; Bath and Portland Stone Firms, Ltd., Portland stone; Patent Impervious Stone Co., Ltd., imitation stone; F. A. Norris & Co., steel casements and escape stairs; John Blaikie and Sons, Ltd., plumbing and gas work; A. Goslett & Co., Ltd., sanitary goods; Permanite, Ltd., asphalt; F. de Jong & Co., Ltd., fibrous plaster and decorations; W. J. Furse & Co., Ltd., orchestra and console lifts; John Compton Organ Co., Ltd., organ; F. H. Pride & Co., electric fittings; Frigidaire, Ltd., refrigerators; Concrete, Ltd., roof; Benham and Sons, Ltd., and Staines Kitchen Equipment Co., Ltd., kitchen equipment; British Challenge Glazing Co., glazing; Automaticket, Ltd., pay-box equipment.

Westgate, Newcastle (pages 744-5) General contractors, J. and W. Lowry. Sub-contractors :

The Lambhill Ironworks, Ltd., steelwork; Concrete, Ltd., concrete floors; The Empire Stone Co., artificial stone; Gibb Bros., bricks; Saunders and Taylor, heating and ventilation; Sturtevant Engineering Co., vacuum plant; R. A. Evans, Ltd., orchestra lift; General Electric Co., Ltd., electric fittings and signs; N. F. Ramsay & Co., hardware; W. W. Turner & Co., seating and furnishing; Reed, Millican & Co., leaded glass; Fredk. Braby & Co., casement windows; Potterax Gate Co., collapsible gates; Automaticket, Ltd., pay-box equipment.

Beaconsfield (page 749). General contractors, H. J. and A. Wright, Ltd. Sub-contractors: G. N. Haden and Sons, Ltd., heating; Higgins and Griffiths, Ltd., electric light fittings; Campbell Bros., decorations; F. De Jong & Co., Ltd., fibrous plaster; General Electric Co., external electrical fittings; Automaticket, Ltd., pay-box equipment; F. H. Pride & Co., electric fittings.

Empire, Leicester Square (pages 752-3). General contractors, Anglo-Scottish Construction, Ltd. Sub-contractors: Tees Side Bridge and Engineering Co., Ltd., structural steel; Caxton Floors, Ltd., constructional floors; Carrier Engineering Co., Ltd., ventilation and refrigeration; Central Joinery Co., Ltd., joinery; Patent Impervious Stone Co., Ltd., artificial stone; Mather and Platt, Ltd., sprinklers; H. T. Jenkins and Son, Ltd., marble work; Sturtevant Engineering Co., Ltd., vacuum cleaning apparatus; West Bromwich Casement Co., Ltd., steel casements; Waygood-Otis, Ltd., lifts and enclosures; G. Jackson and Sons, Ltd., fibrous plaster; F. Burkitt, stage lantern light and gear and shutters to projection and trial booths; Wotton and Son, glass and glazing; Art Pavements and Decorations, Ltd., tiling and terrazzo; Comyn Ching & Co., ornamental iron and bronze work; Expanded Metal Co., Ltd., suspended ceilings; Frigidaire, Ltd., water-cooling system to drinking fountains; Samuel Haskins, Ltd., ticket booth; F. Braby, Ltd., copper cresting to Leicester Street; Metro-Vick Co., Ltd., electric light fittings; Waring and Gillow, Ltd., decorations, furnishings, and draperies; American Seating Co., Ltd., seats; Ragusa Asphalte Paving Co., Ltd., asphalt; Adamite Co., Ltd., waterproofing ("Colemanoid"); Young, Osmond and Young, special tubular heating; E. Pollard & Co., Ltd., directional signs; Automaticket, Ltd., box-office equipment and ticket-issuing machines.

Lido, Golders Green (pages 754–5). General contractors, Hammond and Barr. Sub-contractors: Somerville Barnard Construction Co., structural steel; Turner's Trafford Tile Co., tiles; Emanuel and Sons, sanitary fittings; Crittall Manfg. Co., Ltd., casements; Clark and Fenn, decorative plaster; Automaticket, Ltd., pay-box equipment.

Regent, Bournemouth (pages 758-9). General contractors, McLaughlin and Harvey, Ltd. Sub-contractors: H. Young & Co., Ltd., constructional steel; Leeds Fireclay Co., Ltd., terra-cotta work; Clark and Fenn, Ltd., painting and decorating; General Electric Co., Ltd., and Siemens Electric Lamps and Supplies, Ltd., lamps; Siemens Brothers & Co., Ltd., electric cables, etc.; F. H. Pride, ornamental fittings, flood lights, etc.; Automaticket, Ltd., pay-box equipment.

Green's Playhouse, Glasgow (page 761). The work was done chiefly by direct labour. Contractors: reinforced concrete, designed by Allen Construction Co. and executed by G. Green, Ltd.; Bladen & Co., structural steel; L. Toffolo, Jackson & Co., terrazzo and marble; McDougall & Co., wood block flooring; Jas. Combe and Son, Ltd., central heating; Jas. Combe and Son, and J. Keith, Blackman & Co., ventilation; Shanks & Co., Ltd., sanitary fittings; F. Braby & Co., Ltd., steel casements; Potter Ray, folding gates; H. S. Bathgate and Son, and Holmes and Jackson, plaster; Holmes and Jackson, decorative plaster; John Bennie and Son, lifts.

Rialto, Birmingham (pages 762-3). General contractors: E. Garfield, Ltd. Sub-contractors: Birmingham Concrete Steel Co., reinforced concrete; Hathern Station Brick and Terra Cotta Co., Ltd., terra-cotta; Nortons (Tividale), Ltd., structural steel; Bell's Poilite Co., asbestos slates; Markello, Ltd., patent flooring, and marble and tiling; Hoskins and Sewell, Ltd., casements; Allied Arts and Crafts Guild, decorative plaster and wallpapers; Automaticket, Ltd., pay-box equipment.

Windsor Playhouse (page 764). General contractors, W. Creed & Co. Sub-contractors: W. H. Blake & Co., steelwork; Battiscombe and Harris, decorations; W. N. Froy & Co., Ltd., sanitary fittings; A. Goslett & Co., mirrors; Crittall Manufacturing Co., Ltd., casements; G. E. Taylor & Co., electric installation; Automaticket, Ltd., pay-box equipment; F. H. Pride & Co., electric fittings.

Astoria, Brixton (page 765). General contractors, Griggs and Son. Sub-contractors: The London Brick Co., and Forders, Ltd., Fletton bricks; Brookes, Ltd., artificial stone steps and landings; Leeds Fireclay Co., Ltd., faience work to front; Turner Bros. and Asbestos, Ltd., asbestos roof tiling; J. W. Gray & Co., lightning conductors; Hy. Hope and Sons Ltd., and Morris Singer Co., steel sashes and gearing; The British Challenge Glazing Co., lantern lights and glazing; Frank Burkitt, stage lantern and fire curtain; J. Starkie Gardner, Ltd., dome and ornamental metalwork; F. A. Norris & Co., wrought-iron staircases; A. D. Dawnay and Sons, Ltd., constructional steelwork; The British Reinforced Concrete Eng. Co., Ltd., steel reinforcement; The Carrier Engineering Co., heating, ventilation and air conditioning; Mather and Platt, sprinkler installation, sprinklers, and fire doors; Sturtevant Engineering Co., vacuum cleaning; Leeds Fireclay Co., and Wiggins, Sankey & Co., sanitary fittings; H. E. Gaze, fibrous plaster; Automaticket, Ltd., pay-box equipment; North British Rubber Co., Ltd., rubber flooring; John Compton Organ Co., organ; Portland Cement Selling and Distributing Corpn., "Red Triangle" Portland cement; Evos Doorways, Ltd., doors; Western Electric Co., apparatus for talking pictures; Marb-l-cote Distributing Corporation, Ltd., Marb-l-cote; "Frigidaire," Ltd., Frigidaire.

Commodore, Hammersmith (page 767). General contractors, Thomas and Edge. Sub-contractors: Anselm, Odling and Sons, Ltd., marble work; Automaticket, Ltd., pay-box equipment; British Vacuum Cleaner and Engineering Co., Ltd., vacuum cleaning plant; Frank Burkitt, stage equipment and fire appliances; Carter & Co. (London), Ltd., tiling; Chatwood Safe Co., Ltd., safe; Electrical Installations, Ltd., electrical installation; Furse & Co., Ltd., organ lift; General Electric Co., Ltd., electric fittings; J. W. Gray and Son, lightning conductors; Hathern Station Brick and Terra Cotta Co., Ltd., terra cotta; W. James & Co., Ltd., metal sashes; Rubery, Owen & Co., Ltd., steelwork; Western Electric Co., Ltd., talking apparatus.

Adelphi, Birmingham (page 771). General contractors, W. J. Whittall and Son. Sub-contractors: British Reinforced Concrete Eng. Co., reinforced concrete; Speakers, tiles; Oldakers, patent glazing; Hollis Bros., Ltd., wood-block flooring; Robin Hood, boilers; Ingram and Kemp, electric light fixtures; Bryans Adamanta, plaster and decorative plaster; Marbello, marble and tiling; W. W. Turner & Co., furniture; General Electric Co., Ltd., signs; Automaticket, Ltd., pay-box equipment.

Regal, Marble Arch (page 755). General contractors, F. G. Minter, Ltd. Sub-contractors: Caxton Floors, Ltd., patent flooring; Ragusa Asphalte Paving Co., Ltd., waterproofing materials; J. M. Pirie & Co., Ltd., entrance doors; Crittall Manufacturing Co., Ltd., casements; S. W. Francis & Co., Ltd., rolling shutters; Merryweather & Co., curtain counterweights; Frank Birkett, fireproof curtain; Leeds Fireclay Co., Ltd., sanitary fittings; Cement Marketing Board, Blue Circle cement.

Carlton, Hull (page 773). General contractors, Greenwood and Sons, Ltd., Sub-contractors: Hollow Steel Floor Co., Ltd., reinforced concrete; Hull Concrete Stone Co., Ltd., artificial stone; Alfred Whitehead, Ltd., terra-cotta; A. D. Dawnay and Sons, Ltd., structural steel; Hollis Bros. & Co., Ltd., wood-block flooring; O. Toffolo and Sons, mosaic floors to vestibules; National Radiator Co., Ltd., boilers; General Electric Co., Ltd., electric light fixtures; Leeds Fireclay Co., Ltd., sanitary fittings; W. and R. Leggott, Ltd., door furniture; Doodson and Bain, casements; Gimson & Co., Ltd., folding gates; Sturtevant Engineering Co., vacuum cleaning plant; A. Whitehead, Ltd., tiling.

Carlton, Upton Park. (page 775) General contractors, Douglas Halse & Co., Ltd. Sub-contractors: Anselm Odling and Sons, Ltd., Roman stone and marble works; H. Arnault, Ltd., bronze electroliers; Birmingham Guild, Ltd., handrailing; John Elbo, cork flooring; Haywards, Ltd., skylights and metal sashes; Hathern Station Brick and Terra Cotta Co., Ltd., faience front; John Compton Organ Co., Ltd., organ; Leyland and Birmingham Rubber Co., Ltd., rubber flooring; Superlite Cinema Screen Co., screen.

Ivory and polychrome glazed terra-cotta has been used in the front of the Carlton Cinema, Upton Park; ribbed grey vitreous terra-cotta in the entrance to the Rialto Cinema, Birmingham; and ivory "Hathernware" terra-cotta in the front at the Commodore Cinema, Hammersmith; the whole of the above work being manufactured and erected by the Hathern Station Brick and Terra Cotta Co., Ltd.

The screens in the Atrium, Capitol, Emelka Palast and Titania Palast, Berlin, and that in the Alexandra, Copenhagen, were erected by the Superlite Cinema Screen Co.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

A Roman Catholic school is to be erected at ELTHAM.

Messrs. R. J. MacKenzie and Sons, Ltd., are to construct four streets on the Horn Park Estate, ELTHAM.

Mr. H. W. Selley has purchased 17 acres of land on the St. Helier estate, MORDEN, for the erection of houses.

Mr. G. T. Crouch has acquired 24 acres of land on the St. Helier estate, MORDEN, for the erection of houses.

The BERMONDSEY B.C. has prepared a scheme for the reconstruction of the Vaughan Street area, at a cost of £57,000.

The Middlesex Education Committee is to erect a school for 650 pupils at HAYES, and to enlarge the Townfield school, to accommodate an additional 750 children.

The Middlesex Education Committee is acquiring a site at SOUTH RUISLIP for the erection of an elementary school, and is also to erect an elementary school at KINGSBURY to accommodate 400 children.

Plans passed at STREATHAM:—Sixteen houses, Leigham Court Road, for Mr. H. Chasemore; two houses, Broadlands Avenue, for Mr. Hugh Mackintosh; twelve houses, Conifer Gardens, for Mr. B. Utting; seven houses, Abbotswood Road, for Mr. Hugh Mackintosh; house, Valleyfield Road, for Mr. W. Fitch.

Plans passed by the BARKING U.D.C.:—Lay-out for oil-blending plant, West Bank, for the Russian Oil Products, Ltd.; building, Jenkins Lane, for Messrs. Gross, Sherwood and Heald, Ltd.; 345 houses, Becontree, for the L.C.C.; can-filling store, River Road, for the Albion Oil and Petrol Co., Ltd.; six garages, rear of Longbridge Road, for Mr. J. Clement; ten shops, Hedgeman's Road, for the L.C.C.

Plans passed at PLUMSTEAD :—Twenty-one houses, Verdun Road, for Mr. W. F. Cave; house, Bostall Hill, for Mr. S. Scott Mackintosh; house, Bostall Hill, for Mr. J. B. Farrugia.

Plans passed by the LEWISHAM B.C. :—Garages, Shipman Road, Forest Hill, for Mr. P. Winter; shop, Brockley Rise, Forest Hill, for Mr. R. Coppin; garages, site between 9 & 11, Queensthorpe Road, for Messrs. Walter Cobb, Ltd.; four houses, Panmure Road, for Mr. E. H. Wilkins; premises, Verdant Lane, for Messrs. H. & J. Taylor, Ltd.

A cinema that will accommodate nearly 4,000 persons and embody several new features in design, is to be built on the site of the old Emporium, opposite the Elephant and Castle, SOUTHWARK. The foundations are to be taken down to a depth of about 30 ft. to overcome the presence of running sand. The theatre will, it is expected, be completed in about a year's time.

Plans passed at CATFORD :—Twelve houses, Selworthy Road, for Mr. A. Kirkham; two houses, Westwood Park, for Mr. G. H. Skinner; twelve houses, Ravensbourne Park, for Mr. W. Warman; extensions, Glenifer Laundry, Bromley Road, for Mr. S. F. Prior; shop, Verdant Lane, for Messrs. Grace and Farmer; thirty houses, Daneby Road, and forty-two in Clantock Road, for Mr. A. E. Thomas; three shops, Bromley Road, for Mr. A. Frampton.

Plans passed at ELTHAM :—Eight houses, Green Lane, for Mr. F. Catton; sports pavilion and cottage, Kidbrooke Lane, for Mr. W. R. Hindmarsh; school chapel, Westhorne Avenue, for Messrs. Crouch, Butler and Savage; bungalow, Blanmerle Road, for Mr. F. Holder; three houses, Cadwallon Road, for Messrs. Eaglen Bros.; store, Avery Hill Road, for Mr. H. W. Slegg; house and office, Wellhall Road, for Royal Arsenal Co-operative Society, Ltd.; twenty-four houses, Sidcup Road, for Mr. W. R. Hindmarsh.

SOUTHERN COUNTIES

Messrs. Folker and Horton are to develop the Ardmore Estate, Manor Road, GUILDFORD.

The BRIGHTON Education Committee has obtained sanction to borrow £12,250 for the erection of the proposed council school in Hertford Road.

The HASTINGS Corporation Museums Committee has approved plans submitted by the borough engineer for additions to the museum at John's Place, at an estimated cost of £5,000.

The Hampshire Education Committee has voted £14,800 for the erection of a new senior school at SALISBURY, and is to erect a senior school at Shakespeare Road, Eastleigh, at a cost of £15,150.

It was reported at a recent meeting of the WORTHING Town Council that during three months this summer plans had been passed for the erection of nearly 400 buildings, at a total estimated cost of £249,000.

Plans passed by the HASTINGS Corporation :—Two houses, Saxon Road, for Mr. E. J. Oram, architect; bungalow, Beaconsfield Road, for Mr. J. Hunt, architect; infirmary and dormitory wing, Convent of Holy Child Jesus, Magdalen Road, St. Leonards, for Mr. H. Burleigh, architect; two houses, St. Helen's Road, for Mr. H. M. Jeffery, architect; four houses Bexhill Road, St. Leonards, for Messrs. Ward, Son and Wray, architects; conservatory and gymnasium, etc., The Tower School, The Croft, for Mr. R. Hembrow, architect; house, Marina, St. Leonards, for Messrs. Ward, Son and Wray, architects.

Plans passed by the PORTSMOUTH Corporation :—Six houses, Compton Road, for Mr. W. A. Roberts; twelve houses, Stride Avenue, for Messrs. McCarthy Bros.; eleven garages, Madeira Road, for Messrs. Brown and Fuller; twelve houses, Lichfield Road, for Mr. J. Rihoy; business premises, Elm Grove, for Messrs. G. J. Davis and Sons; two houses, Hewett Road, for Mr. J. Wedge; two houses, Amberley Road, for Mr. A. J. Chase; twenty-two houses, Lyndhurst Road, for Mr. R. J. Winnicott; six houses, Crofton Road, North End, for Messrs. G. Coleman and Son; six houses, Crofton Road, North End, for Mr. J. McDermott; church, Penarth Avenue, Cosham, for Portsmouth Diocesan Church Extension Committee; alterations, Twyford Arms B.H., Twyford Avenue, for Mr. H. G. Hellyer.

SOUTH-WESTERN COUNTIES

The BRISTOL Corporation has prepared plans for the erection of new wholesale markets on a site in the vicinity of Philadelphia, at a cost of £184,000 in the first instance. The complete scheme will involve an estimated expenditure of £256,000.

Plans passed by the PLYMOUTH Corporation :—Stores, rear of 4 Lower Knolly's Terrace, for Messrs. Harris and Sons; addition to café, 199 Union Street, for Mr. Williams; two houses, Green Park Avenue, for Mr. H. Holmes; bungalow, Elmfield Road, for Mr. R. Bate; two houses, Weston Park Road, for Mr. E. J. Morrish; bungalow, Berrow Park Road, for Mr. A. Manning; addition to station, Union Place, Stonehouse, for St. John's Ambulance; factory, Oakfield Terrace, for Messrs. Clark, Doble & Co., Ltd.; alterations, 12 Bedford Street, for Messrs. H. E. Closs & Co., Ltd.; four houses, Efford Lane, for Great Western Railway Housing Society, Ltd.; addition to shop, corner of Russell Street and Mill Street, for Messrs. May & Co.; addition, Grand Hotel, The Hoe, for Grand Hotel Co.; four bungalows, Salcombe Road and Prince Maurice Road, for Mr. J. Rendle.

MIDLAND COUNTIES

The DUDLEY Corporation is to erect ten houses on the Yew Tree Estate, and twenty-six houses on the Wolverton site.

The LEICESTER Corporation has sold a site at Westcotes to the Office of Works for the erection of a telephone exchange.

The DUDLEY Corporation Housing Committee has approved plans for the erection of thirty houses in Wolverton Road.

The BURTON-ON-TRENT Corporation is to construct a riverside walk from Band Corner to Jerram's Lane, at a cost of £6,750.

The ILKESTON Corporation has approved plans and estimates for the erection of sixty-four non-parlour houses on the Northern housing site.

The SMETHWICK Corporation is to apply to the Ministry of Health for sufficient land from Victoria Park to permit of the erection of a town hall.

The DUDLEY Housing Committee has instructed the borough engineer to prepare a scheme for the erection of an additional 500 houses on the Priory Estate.

The NOTTINGHAM Education Committee is to erect elementary schools for 2,760 children on the Aspley Estate, where the Corporation is shortly to build 1,700 houses.

The Worcestershire Education Committee has accepted plans for the new secondary school at REDDITCH, submitted by Mr. H. W. Simister of Birmingham. This scheme provides for a two-story building for 350 pupils, at an estimated cost of £29,000.

Plans passed by the DUDLEY Corporation :—Store, Furnace Yard, Netherton, furnaces for Mr. J. H. Round; conversion of Oakham Lodge into three houses, for Messrs. H. S. Pitt & Co.; house, Halesowen Road, Netherton, for Mr. T. W. Homer; house, Blackbrook Road, for Mr. D. Millington; alterations, "Loving Lamb" inn, Netherton, for Wolverhampton and Dudley Breweries, Ltd.; two machine shops, Burnt Tree works, for Messrs. Ewarts, Ltd.

NORTHERN COUNTIES

The YORK Corporation has decided to submit plans to the Ministry of Health of small houses for old people.

The LEEDS Corporation has obtained sanction to borrow £61,000 for the erection of further houses on various estates.

The STRETFORD U.D.C. has received sanction to borrow £18,163 for the erection of an elementary school at Low Moss Lane.

The CARLISLE Corporation has requested the Health Committee to formulate its proposals for slum replacement schemes.

The LEEDS Education Committee has obtained sanction to borrow £53,880 for the erection of the proposed Roundhay high school for girls.

The BLYTH Corporation has decided to carry out, by direct labour, a scheme for sanitary improvements and sewerage at a cost of £21,000.

Sir Walter Runciman is to lay the foundation-stone of the new extension of the Nurses' Home at the NEWCASTLE Royal Victoria Infirmary on November 14.

The STRETFORD U.D.C. has approved plans for the construction of a public hall, library and wash-house at Trafford Park, at an estimated cost of £10,300.

The BLYTH Corporation Housing Committee recommends the acquisition of land and buildings at South Farm, required for the erection of twenty-two houses.

The ROTHERHAM Corporation has approved the lay-out of the Herringthorpe estate for the erection of a further 440 houses. The cost is estimated at £190,000.

The HULL Corporation is to seek Parliamentary powers to borrow £200,000 for the construction of buildings in the new street from Paragon station to Beverley Road.

The ROTHERHAM Education Committee has submitted to the Board of Education preliminary plans for the erection of an elementary school on the Herringthorpe estate.

The HULL city engineer has prepared a plan for the construction of a bridge over the railway at Marfleet Lane. The plan is to be submitted to the Ministry of Transport.

The MANCHESTER Education Committee has approved plans for the erection of new schools at Barlow Hall, Chorlton-cum-Hardy, and Briscoe Lane, Newton Heath.

The Union Bank of Manchester, Ltd., is to erect a bank at Homes Chapel, CHESHIRE.

The ROTHERHAM Education Committee has instructed the borough engineer to prepare plans for the enlargement of the South Grove and the Kimberley Road central schools.

The Leeds Watch Committee has passed plans submitted by West Leeds Amusements, Ltd., for the erection of a cinema, shops, &c., at Wellington Road, NEW WORTLEY.

The BRADFORD Corporation has approved plans submitted by the city architect for the erection of new buildings on vacant land in Bank Street and Brook Street, at an estimated cost of £11,000.

At a meeting of the HULL Corporation Electricity Committee, it was agreed to take over a site on the new street from Paragon Station. The electrical engineer was asked to prepare designs for the new showrooms and administration buildings.

The YORK Corporation has prepared plans for a new bridge and approach roads at Burton Stone Lane, at an estimated cost of £17,000, and a new bridge and approach roads at Haley's Terrace to Pottery Lane, at an estimated cost of £8,400.

The YORK Corporation has decided that the 100 houses to be erected fronting to the main road on the Burton Stone Lane Estate should be parlour type with three bedrooms, and that a site be reserved in the centre of the estate for the erection of shops.

The TYNEMOUTH Corporation has passed plans of the borough surveyor and housing architect providing for the erection of seven blocks (four flats per block) of three-roomed maisonnettes, and one block comprising a house and shop, on the Chirton hutments site.

Plans passed by the CHESTERFIELD Corporation : Bungalow, Storrs' Road, for Messrs. J. Collis and Sons, Ltd.; lay-out of Chatsworth Road, for Mr. W. Hancock; bungalow, Hawksley Avenue, for Messrs. J. Collis and Sons, Ltd.; bungalow, Morris Avenue, for Mr. W. Maltby.

Plans passed by the SHEFFIELD Corporation: Eight houses, Willoughby, Wade, Hinde and Pople Streets, for Mr. Thos. Pye; two houses, Whirlow Court Road, for Mr. C. G. Robinson; four houses, Greystones Grange Road, for Messrs. W. Malthouse, Ltd.; seventy-three houses, Wisewood Estate, for the Corporation.

Plans passed by the ROTHERHAM Corporation: Extensions, Rawmarsh Road, for Messrs. Gummers, Ltd.; conversion, "Milton Arms" P.H., Norfolk Street, into sale shop, for Messrs. H. Wigfall and Son, Ltd.; two houses, Old Wortley Road, for Mr. R. Harrington; shop, &c., James Street, for Rotherham Co-operative Society, Ltd.; rebuilding "Horse and Jockey" P.H., Greasborough Street, for Messrs. Whitworth, Son and Nephew, Ltd.

Plans passed by the STRETFORD U.D.C.: Sewering and formation of Northleigh Road and Manor Road, for Sir H. E. de Trafford, Bt.; two houses, Auburn Road, for Messrs. Smith and Allcock; fifty-five houses, Northleigh and Rye Bank Roads, for Mr. W. R. Rochell; two houses, Barton Road, for Messrs. Grimshaw and Thomas, Ltd.; core shop and office, Westinghouse Road, for Messrs. Metro-Vickers Electrical Co., Ltd.; extension, Westinghouse Road, for British Alizarine Co., Ltd.; shops, Hullard Street, for Mr. S. Eastwood; flats and garages, Chester Road, for Messrs. Cotton Storage Co., Ltd.; wash-houses, King Street, for Mr. J. Bradshaw; office extension, Elsinore Road, for Messrs. R. Carlyle & Co., Ltd.

Plans passed by the YORK Corporation: Two houses, Heworth Hall Drive, for Messrs. T. and M. Caffrey; additions, Kilburn House, Fulford Road, for United Automobile Services, Ltd.; additions, 20 East Mount Road, for Dr. Chapman; two houses, Cornborough Avenue, for Mr. A. Temple; shop and café, Coney Street, for Messrs. Montague Burton, Ltd.; transformer sub-station, Trafalgar Street, for the Corporation; sub-station and conveniences, Holgate Beck Bridge, for York Corporation; lay-out, Muncaster estate, for Mr. Denby Collins; house, Temple Lane, Copmanthorpe, for Mr. A. Bennett; hall, Tang Hall Lane, for Rev. H. Horrox; two houses, Shipton Road, for Clifton Estate, Ltd.; three houses, Manor Drive, Acomb, for Messrs. Simpson Bros.; house, Rawcliffe Lane, for Mr. T. E. Dresser; cabinet works, Huntington Road, for Messrs. Holmes & Co.; house, Rawcliffe Lane, for Mr. H. Aldam.

WALES

The Carmarthenshire and Cardiganshire County Councils propose to erect a bridge over the River Teify at LAMPETER, and hope to get a Government grant of 75 per cent. of the cost.

A new school is to be erected at Mardy House (the home of the late Lord Merthyr) by the managers of the Aberdare National Schools. The work is to commence immediately, and will be completed, it is hoped, by Easter, 1930.

MISCELLANEOUS

The NEWPORT (I.O.W.) Corporation is considering the erection of further houses on the South Street estate.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead ..	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1*s.* 4*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* NAVVY, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.

Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5

DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.

If left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0

DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.

LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* BRICKLAYER, 1*s.* 9*d. per hour;* PLUMBER, 1*s.* 9*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Stoneware pipes, tested quality, 4 in. per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Jaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¼ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			

Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO., 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in. per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1*s.* 9*d. per hour;* DO. *fixer,* 1*s.* 10*d. per hour;* LABOURER, 1*s.* 4*d.* per hour; SCAFFOLDER, 1*s.* 5*d. per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1*s.* 9*d. per hour;* TILER, 1*s.* 9*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

	Med. Grey	Med. Green
Portmadoc Ladies	£14 0 0	
Countess	23 0 0	
Duchess	32 10 0	
Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6

Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1*s.* 9*d. per hour;* JOINER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Timber, average prices at Docks, London Standard

Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6

PITCH PINE, add 33⅓ per cent.

FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for cutting, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1⅛ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1⅛ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO.. in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¼ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, 7/32 in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	17	0
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	3
Liquid driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	18	0
DO., *flat, per gall.*	0	16	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	5/16 in.			⅜ in.			½ in.			⅝ in.			¾ in.		
Qualities ..	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	3	5	4	3	7½	6	4½	8½	7	6			
Alder	5½	3	3	5	4	3	6½	5½	4½	8	7	6			
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—			
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—			
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—			
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—			

THE ARCHITECTS' DIARY

WEDNESDAY, NOVEMBER 20

BRADFORD CENTRAL AREA IMPROVEMENT SCHEME. Continuation of Exhibition of the Designs at Telegraph Chambers, Market Street, Bradford, until Saturday, November 23. 10 a.m. till 8 p.m. **10 a.m.**

WESTMINSTER CITY SCHOOL, Palace Street, Victoria Street, S.W.1. "My Experiences of Magic in West Africa." By Lady Dorothy Mills. **5.30 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Shop Fronts and Shop Signs." By Hastwell Grayson, M.A.

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. "The Protection of Rural England." By P. Morley Horder. **8 p.m.**

THURSDAY, NOVEMBER 21

GEFFRYE MUSEUM, Kingsland Road, E.2. Lantern lecture on "Mouldings—Their Proportion and Place in Design." By E. J. Warne. **7 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Fifth of a course of eight Public Lectures. "Delphi." By Dr. Ernest A. Gardner. **5 p.m.**

NORTHERN POLYTECHNIC, Holloway, N.7. "Modern Architecture." By Howard Robertson, S.A.D.G., F.R.I.B.A. **7 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "The Van Eycks." By Maurice W. Brockwell. **5.30—6.30 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Origin of Architecture: II." By Cecil Hallett, B.A., F.S.A. **12 noon**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "Low-Temperature Carbonization of Fuel, with special reference to its combination with the production of Electricity." Introductory papers by E. H. Smythe and E. G. Weeks (English Practice); S. McEwen (American Practice); Prof. Dr. Ing. P. Rosin (German Practice). Light refreshments at 5.30 p.m. **6 p.m.**

FRIDAY, NOVEMBER 22

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee.

NATIONAL SMOKE ABATEMENT SOCIETY, Room E.17, College of Technology, Sackville Street, Manchester. "Smokeless Fuels." By William Gibson, M.SC.TECH.A.I.C. **7 p.m.**

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the Apothecaries Hall, Water Lane, Queen Victoria Street, E.C.4. **3 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Ordinary Meeting. Paper on "The Province of the Architect and the Structural Engineers." By H. T. Jackson, A.R.I.B.A. **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Seventeenth Century Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon**

SATURDAY, NOVEMBER 23

Sunrise, 7.33 a.m. Sunset, 4 p.m.

MONDAY, NOVEMBER 25

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "The A.A. Excursion to Germany." By E. R. Jarrett, A.R.I.B.A. **8 p.m.**

L.C.C. SCHOOL OF BUILDING, Brixton, S.W.4. Last day for entry for Institution of Structural Engineers' Examinations.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Chinese Porcelain." By L. O. Faraker. **12 noon**

TUESDAY, NOVEMBER 26

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the works of Achille Serre, Ltd., Blackhorse Lane, Walthamstow, E.17. **2.30 p.m.**

WEDNESDAY, NOVEMBER 27

WESTMINSTER CITY SCHOOL, Palace Street, S.W.1. "By Car From Nile to Niger and Across the Sahara." By Owen Tweedy. **5.30 p.m.**

C.P.R.E., 17 Great Marlborough Street, Regent Street, W.1. Informal dinner to be held at Burlington Hotel, Cork Street, W.1. Subject of discussion: "National Parks." **7.30 p.m.**

THURSDAY, NOVEMBER 28

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee.

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Sixth of a course of eight Public Lectures. "Eleusis." By Dr. Ernest A. Gardner. **5 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Painters of the Norwich School." By S. C. Kaines Smith, M.B.E., 5.30–6.30 p.m. "Italian Renaissance Furniture." By L. O. Faraker. 3 p.m. **3 p.m.**

FRIDAY, NOVEMBER 29

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By L. O. Faraker. "Georgian Furniture." By T. F. Wilson, F.R.S.A.I. Both lectures at 12 noon. **12 noon**

SATURDAY, NOVEMBER 30

Sunrise, 7.44 a.m. Sunset, 3.53 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Seventeenth Century Furniture." 12 noon. "French Renaissance Furniture." 3 p.m. Both lectures by L. O. Faraker. "Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon**

L.C.C. SCHOOL OF BUILDING, Ferndale Road, Brixton, S.W.4. Last day for entry for Royal Sanitary Institute examinations.

MONDAY, DECEMBER 2

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By L. O. Faraker. **12 noon**

WEDNESDAY, DECEMBER 4

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Some Architectural Poisons Abroad." By A. Trystan Edwards.

INSTITUTION OF STRUCTURAL ENGINEERS. Lancashire and Cheshire Branch. At the College of Technology, Manchester, at 7 p.m. Third Ordinary Meeting. Discussion on (i) "Reinforced Concrete Joints and Connections," to be opened by G. P. Bridges A.M.INST.C.E. (ii) "Welding as a Method of Jointing Structures," to be opened by P. L. Roberts, A.M.C.T., M.I.WELD.E. **7 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Advertiser and the Disfigurement of Town and Countryside: Criticisms and Suggestions." By H. H. Peach. Sir Lawrence Weaver, K.B.E., will preside. **8 p.m.**

THURSDAY, DECEMBER 5

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, W.1. "Some Notes on Modern Steel-frame Construction." By W. C. Cocking. **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Lettering." By Eric Gill. **5.30—6.30 p.m.**

THE GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Sir Christopher Wren and his Influence on the Craftsmen of his Time." By Percy Lovell. **7.30 p.m.**

UNIVERSITY OF LONDON, University College. "Shelley and Italy." A Public Lecture, by Prof. Edmund G. Gardner, F.B.A. **5.30 p.m.**

SATURDAY, DECEMBER 7

Sunrise, 7.53 a.m. Sunset, 3.50 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." 12 noon. "English Seventeenth Century Furniture." 3 p.m. Both lectures by L. O. Faraker. "Indian Section: Sculpture." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon**

MONDAY, DECEMBER 9

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Eighteenth Century Furniture." 12 noon. "Italian Renaissance Furniture." 3 p.m. Both lectures by L. O. Faraker. **12 noon**

WEDNESDAY, DECEMBER 11

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Overheads and other Factors Influencing Road Transport Costs, from an Engineer's Viewpoint." By Major Charles Wheeler, O.B.E., M.I.A.E. John Maughling will preside. **8 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, DECEMBER 12

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Veneering, Past and Present." By C. A. Hindley. **7.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Mediæval Brasses." By Muriel Clayton. **5.30—6.30 p.m.**

FRIDAY, DECEMBER 13

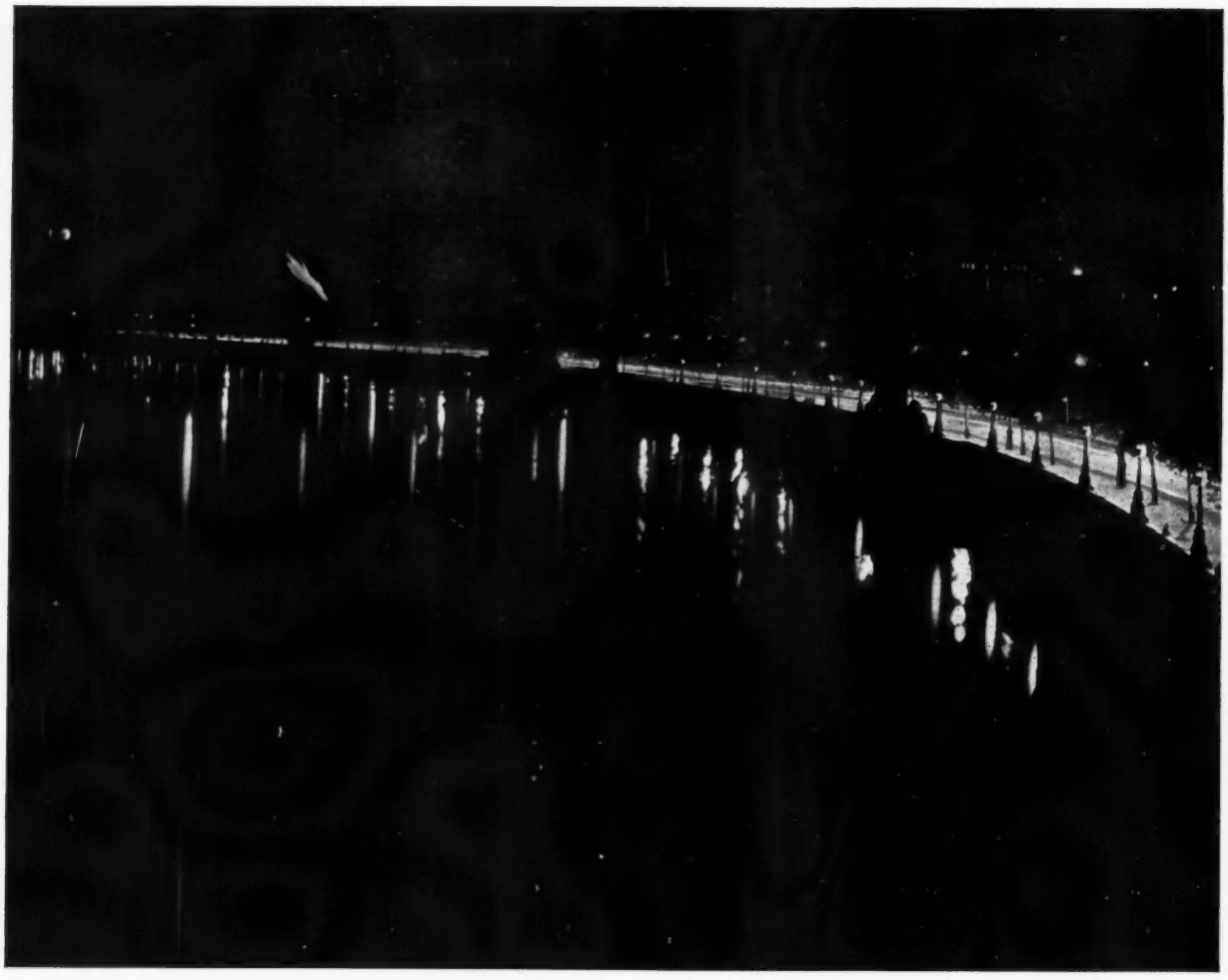
INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Informal Meeting. Discussion on "Welded Steel Structures," to be opened by A. Lakeman, L.R.I.B.A. **7 p.m.**

SATURDAY, DECEMBER 14

Sunrise, 8.1 a.m. Sunset, 3.49 p.m.

WEDNESDAY, DECEMBER 18

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Architectural Rendering." By E. M. K. Ellerton, A.R.I.B.A.



THE VICTORIA EMBANKMENT AT NIGHT: A STUDY UNDER THE NEW LIGHTING

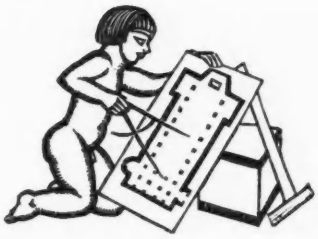
The view is taken from Waterloo Bridge. The spectator faces north-west; he sees the Line of the Embankment drawn by Bazalgette. It is marked in lengths of granite conjoined and cemented with the purpose that they shall remain for ever. It is a Line of stringent power; it curves with vitality; it denies the access of the river to the land, and the plunge of the soil into the waters. It rules the flowing and lapsing tides and the direction of the stream.

The river of light on the road is divided by the Line from the mirror of the Thames sucking down the lamplight into its blue tones. The railway bridge does not check the Line, sweeping below, but the lights on that bridge, for whose destruction men prepare, salute the Line, for they, about to die, bow their rays into the dark mirror of the Thames.

On the curve of the Line, as on a bow, is laid the arrow of the Obelisk which, come from 3,000 years of the past, is being loosed into 3,000 years of the future; below on each side the smooth head and haunches of a bronze sphinx reflect a glimmer of light, and near by, hardly discernible, the sphinx-like heads of the black standards, which hold seats, hold on their worn and polished fronts the light also. The human shape huddled into the space four feet between each pair of standards reflects no light at all, and only by its prone attitude salutes the Line which still stringently binds the frivolity of the light to the despair of the darkness.

P. M. S.

THE ARCHITECTS' JOURNAL



WEDNESDAY, NOVEMBER 20, 1929

UNDERGROUND OR OVERHEAD?

"To be, or not to be, that is the question."
—HAMLET.

A COMPROMISE is one of the least-loved things in life. It satisfies neither side, while still robbing each of a righteous claim to martyrdom. Yet is a compromise of sorts inevitable in most disputes, and it would appear to be so in the current contention anent the disposal of the long-distance electricity transmission cables which are to be installed throughout the countryside.

Utility has made so many inroads into the beauties of rural scenery that every æsthetic soul rises in anticipatory revolt against the possibilities of the further disfigurement that may result from the proposed overhead lines and supports stretched across our landscapes. Unfortunately the case cannot be dealt with summarily by insistence on the deep burial of these cables. The procedure of burying cables has been adopted successfully before and can be adopted again; but one of the basic objects of the electricity scheme is to make widely available *at economical rates* power for industry and public service. When, therefore, the demands of the æsthete are brought face to face with the economist's claim that overhead lines are the cheaper in initial cost and in maintenance, the question resolves itself into a battle between æsthetic values and utilitarian values.

Civilized humanity in general is prepared to pay something for the preservation of the beautiful, particularly if the payment is not to be made too directly and individually; but the burden must not be too onerous or obvious. Moreover, the destruction of beauty in the interests of convenience does not usually meet with opposition very well sustained. Electricity has become so much a necessity to our industrial, civic and domestic existence that the dice are loaded in its favour in the cast for precedence.

We may take comfort from the fact that the strenuous fight by such bodies as the Council for the Preservation of Rural England against any unnecessary despoliation of rural scenery is securing such widespread support. In the Keswick district, at least, a compromise has been arrived at, whereby a limit is set to encroachments on the beauties of the Lake District. The National Trust has secured an arrangement whereby the line to Keswick will be buried across certain stretches of country that would be marred by pylons, though this will involve considerable extra cost. That is to the good, and so much certainly would not have been secured by lukewarm protest.

It is an unhappy circumstance that there is much difference of opinion as to the actual relative costs of burying cable and of erecting overhead lines, and also as to the technical difficulties of the respective systems. Some writers endeavour to show that, in the ultimate reckoning, there is very little difference between the two, and figures are put forward in support of the claim, even in the technical press, as in the case of the article reprinted in this issue of the JOURNAL. Others, again, refute the contention, which is based on the use of mechanical means for trenching, laying and burying the cable; and admittedly in some types of ground the use of such machinery is not practicable. Viewing these and the many other claims and objections put forward by the protagonists, the layman can only conclude that an impartial and judicial statement of the case is yet to be given.

Were it possible to adjudicate on the intricate questions of costs, the economic and æsthetic values involved, the maximum of accommodation might be accorded to both sides. Such a judgment, however, would call for a wisdom so mature as to make that of Solomon appear infantile. Meanwhile, to refuse a compromise is to lessen the possibility of accommodation in areas where it is vitally necessary.

Pylons and cables against the skyline and in positions of obtrusive prominence are admittedly an abomination; but the case for the æsthetic is not strengthened by denying that due regard to contour and the utilization of natural screening can do much to make overhead lines unobtrusive and inoffensive.

Let us not delude ourselves. Distasteful though it may be to both parties, a compromise which will not involve an extravagant increase in expenditure is all that can be hoped for, if the choicest of England's rural scenery is to be kept intact, while still according scope for utilitarian progress. Posterity, in any case, is not likely to be very profuse in acknowledging our consideration for it.

NEWS & TOPICS

THE C.P.R.E. MEMORANDUM

THE very important memorandum which was submitted to the Prime Minister by the Council for the Preservation of Rural England last August is now public property, and one can scarcely praise too highly both its form and content. The Council is indeed doing splendid work, and has entirely belied the prophecies of those who feared that it would be like so many other committees which sit and do little else. All the proposals made are definitely constructive, and should be of great value to a Government such as the present one, which is ready to increase public expenditure as long as it is certain that public good results therefrom. The subjects dealt with include roads, electric power transmission, playing fields, national parks, general amenities, education and good citizenship. In particular the proposal to establish National Parks is attracting much public attention, and the memorandum points out that the objectives are very varied, and in some ways contradictory, recreation and repose, rambling, camping out, afforestation, nature study and the preservation of flora and fauna being the principal aims. It will be difficult to achieve these objects in a single area, and the Government is invited to take initial steps by making certain inquiries and preliminary surveys.

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An especially valuable part of the memorandum is Appendix B, which outlines proposals for dealing with the transmission lines for electricity which will shortly be erected all over England. The main problem is so to place the long-distance lines as not to traverse localities where the presence of the masts would be incongruous and therefore objectionable, and to ensure as far as possible that stations are acceptably placed from an amenity as well as from an engineering point of view, and that any permanent structure involving building shall be designed by a competent architect. It is suggested that the Electricity Commissioners should regard the C.P.R.E. and C.P.R.W. as bodies to be consulted before the routes on the transmission lines are definitely decided upon.

★

This measure of æsthetic control cannot be achieved unless the local distributing authorities are placed under a definite liability to submit complete plans of their proposed layout of poles, transformer stations, sub-stations, and elevations of any buildings in connection with these to the Electricity Commission so that they may be available for consideration from the point of view of amenities by the C.P.R.E. and C.P.R.W. and the authorities locally interested. And there follows a series of very valuable recommendations which, if followed, will do much to ensure that the electrification of England will not be an excuse for spoiling the countryside. The Council has been invited by the Minister of Transport to confer with him concerning matters arising out of the memorandum.

FLOWERS THAT BLOOM IN THE DARK

Scientific progress is full of unexpected things. Who would have thought that illuminated electric signs would, just as they began to become quite unbearable, blossom into the comparative elegance of neon and mercury-tube lighting? Not that these new quieter forms of lighting are generally used with discretion. Rather the reverse.



An entrancing night sign is that adorning Messrs. Atkinson's premises in Old Bond Street, W. Designed by Norman Wilkinson, R.I., it consists of a gilt copper basket, suspended from a wrought-iron bracket and chain. The whole is outlined for night illumination: as to the basket in neon tubes (red); and as to stems (green) and flowers (blue) in mercury vapour tubes, the green tint being obtained by the use of yellow glass.

But that they *are* capable of being arranged in the most entrancing and jewel-like of designs, the very pretty floral sign that hangs outside Atkinson's in Old Bond Street will show. This is what can be done at the best. We know that the worst that ignorance can do with neon and mercury light is sweetness itself when compared with the older glare. So we progress.

DARTMOOR FOR EVER

Those of us who believe that the possession intact of a few remote, untouched stretches of ancient hill country is essential to the city-living people of today, will join in the chorus of indignation at the proposed establishment of china-clay mines in the wildest and grandest part of Dartmoor. I cannot always agree that such things are necessarily a disfigurement. I like the peculiar cones of white clay which stand about so oddly, yet so finely, in the West Country landscape. But this case is aggravated because its size may attract the formation of some sort of miners' village, and will probably require a railway running to it.

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Further, and of still greater moment to those who live and make their living in Devon, china-clay will pollute and turn into a milky flow the clear waters of the River Dart. It seems hard to turn away a *bona-fide* industry from the extraction of its raw material where it may be found. Yet I imagine that the opposing forces have the greater part of right on their side. There is a lot of china-clay to be got out of Devon in various localities; generally of a higher quality than is to be found on Dartmoor. To

destroy the proper amenities of Dartmoor is bad business for the nation, for there is only one Dartmoor, which to destroy for the sake of second-rate china-clay would be discreditable to the Duchy of Cornwall and to us all.

SCIENCE VERSUS ART

One of the great difficulties of the architect in designing science buildings lies in the absence of any concensus of opinion on the part of educationists and scientists as to the appropriate equipment for specific subjects. Thus it not infrequently happens that conscientious efforts to provide what is asked for excite considerable criticism of the design by a successor in charge of a department. Mr. Alan E. Munby, in his paper read before the R.I.B.A. on Monday night last, said he had more than once suggested to men of science that they might well get together and formulate some outline of requirements for particular subjects and grades of work. I am sorry to note this suggestion has not met with any response, the answer being that everyone has his own special ideas. But, as Mr. Munby points out, the scientist is apt to forget that he is often promoted to some higher sphere while his building has to remain with any special foible visited on the architect as his shortcoming.

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As things stand, architects must as a profession generally find out what the scientist wants and reconcile it with the funds at their disposal, and it must be admitted that most scientists are prepared to take a great deal of trouble in formulating their requirements. Mr. Munby cherishes the remark of a professor to himself that he would much rather have an architect who knew nothing about science buildings than one who thought he knew something. Notwithstanding this generous measure of help from clients, occasions often arise upon which an architect has to advise a lay committee, and it is then that technical knowledge is essential for a successful outcome. I could not help feeling that most, if not all, of that technical information was to be found in Mr. Munby's paper, so much did he have to say upon the classes of science buildings, points in design, the special requirements of three fundamental sciences, fittings in lecture-rooms and laboratories, accessory rooms, and service supplies.

SATELLITE TOWNS AND AIR-PORTS

A deputation from the Garden Cities and Town Planning Association has recently waited upon the Minister of Health with the object of drawing his attention to the need for machinery that will increase the propagation and expansion of garden cities, or, as they are commonly called, satellite towns. Some extra inducements must be offered to industry to offset the stabilizing effect of the Chamberlain De-rating Act, and there must be created new powers of finance for companies capable of fostering the early growth of garden cities, and an extension of powers for town and regional planning so that suitable sites may be found and protected from sporadic urban development. It was also urged that the adoption of the garden city policy would enable a greater use to be made than at present of a system of aerial transport of goods and general air traffic.

★

It is interesting to learn that there are some eighty-eight sites for air-ports under consideration, and that the air-ports of four towns have been already licensed. It seems but a year or so ago that town planners began to scan their maps in anxious search for suitable landing grounds; while here of a sudden no self-respecting town is found to be without its air-port. Another few years will see the sky marked out in regular roads of sky traffic. In practice the selection of tracts suitable for landing grounds requires an expert's knowledge of aeronautics. The prevailing wind, visibility in its several aspects, and many other factors of varying importance, have all to be taken into account before any questions of acquisition are entered into; and many people know how difficult these may be.

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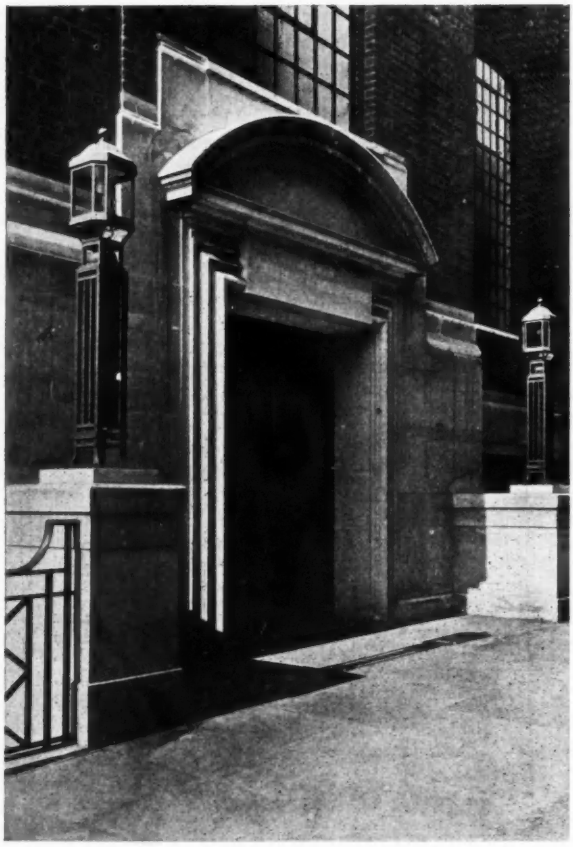
This is a reproduction of a surprising document recently received from more than one of Astragal's correspondents, to whom the circular had been addressed in the first instance. It represents a form of commercial activity particularly obnoxious to members of the profession, betraying, incidentally, as Astragal points out in his succinct note immediately below, a misreading of the situation that is almost pitiful.

'TWILL COST YOU 7s. 6d.

The reason why architects work out their plans is because it is their job to work them out, and they like it. The man who imagines that the thing can be settled at 7s. 6d. a time has only the faintest glimmering of the duties and the difficulties of an architect's life. He is one who is deserving of a low and mediocre fate. He should be kept tracing for ever—but not my plans!

ASTRAGAL

A note upon the proceedings at the dinner-discussion of the Architecture Club on Skyscraper Architecture, specially contributed by E. Maxwell Fry, will be found on page 816. —ED., A.J.



THE SEVENTH CHURCH OF

DESIGNED BY

THE Seventh Church of Christ, Scientist, London, stands on a site in Kensington, bounded on one side by Wright's Lane, and on the other by Iverna Court. It is planned as a rectangular block, with slightly projecting pavilions, each containing a doorway, towards either end. The principal entrance, on the right-hand side of the Wright's Lane front, opens on the foyer, which runs through to a similar doorway from Iverna Court. Double staircases lead to the auditorium above, and to the cloak- rooms below.

The auditorium provides seating accommodation for nearly 1,000 persons. It is 112 ft. long by 72 ft. wide, and the slope of the floor is 1 in 17. No altar is used in the Christ Scientist Church, and the central position is occupied by a platform, on which are two chairs, which are occupied by the Readers who conduct the service. Behind is the organ. There is no choir, but only a soloist, who has a seat on the platform. The seating is arranged in rows of pews, and no privileged seats are provided, except for the ushers who conduct the people to their places. These are given positions at the ends of the pews.

The auditorium takes the form of an undivided interior, with a ceiling coved to a deep central panel, corresponding in size with the seat plan. The walls are cream in colour, and the carpet is peach, approaching orange. The organ screen and pews are in natural oak ; and the mouldings which emphasize the different planes of the

The main entrance in Wright's Lane. An arrangement has been come to with the Kensington Borough Council whereby, in consideration of these lamps being lit at night, one of the street lamps, which was in the way, has been done away with.

West elevation from Iverna Court. The exterior is faced with brown-red bricks, with bricks of a redder colour for the quoins and window surrounds. Portland stone is used for the entrances and string-courses. The roof is covered with slates.



CHRIST, SCIENTIST, LONDON

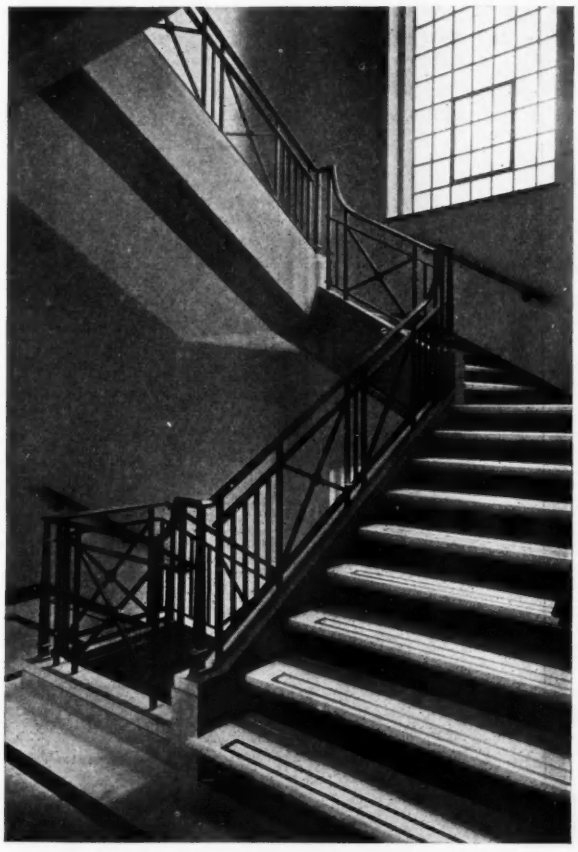
PAUL PHIPPS

coved ceiling are of the same type as those used around the framework of the organ. The radiators, formed of hot-water pipes, are placed behind bronze grilles underneath the windows, where the fresh air enters and is warmed. Above the plaster grille in the centre of the ceiling are the exhausts, which are worked by electric fans.

Beneath the auditorium is a Sunday school, with seating accommodation for over 400. On this floor also are committee rooms, class rooms, a board room, and offices for the clerk and treasurer.

The exterior is faced with brown-red bricks, with redder bricks for the quoins and window surrounds. Portland stone is used for the entrances and the three string courses. The lamp standards on either side of the main entranc displace a public lamp-post which stood in front of the doorway. The Council of the Royal Borough of Kensington have agreed to contribute to the cost of burning these two lamps on condition that they are kept alight for the illumination of the street.

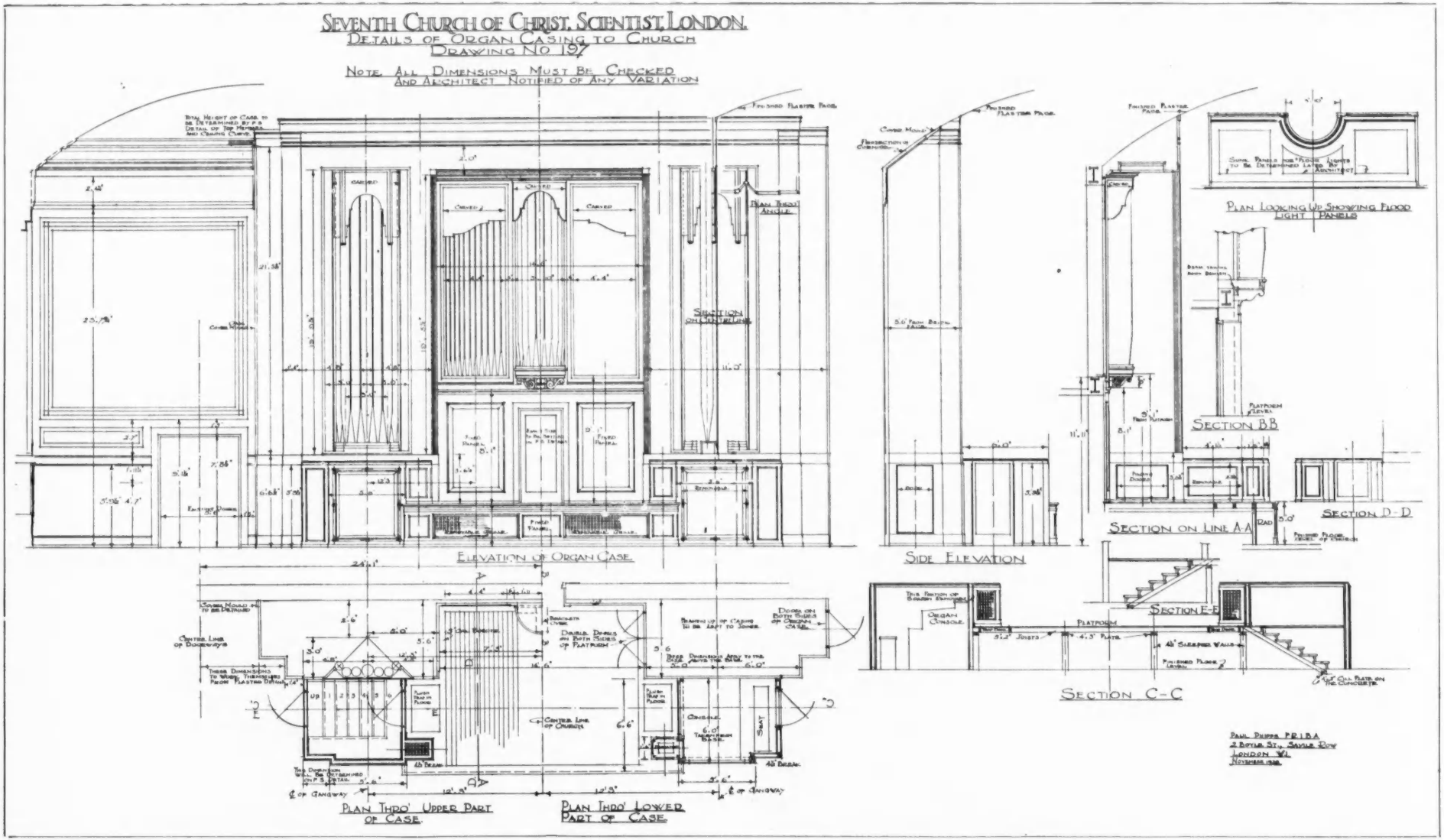
Special precautions had to be taken to make the lift inaudible in its working, owing to the acoustics of the building being so perfect as to transmit the slightest sound over a wide area. A mercury arc rectifier was installed to overcome the noise of the motors operating with the single phase alternating current supply; and the motor, as well as many other details, was specially designed.



One of the main staircases leading up from the ground floor to the auditorium of the church and down to the cloakrooms. There is one of these staircases at either end of the foyer. The balustrades are of wrought iron, and the hand-rails are of bronze.



Foyer looking towards the Iverna Court entrance. On the left are the doors leading to the Sunday school. Between the entrance and the window is the staircase, shown in the top illustration. The window overlooks the area between the two main staircases.



Seventh Church of Christ, Scientist, London.] [*By Paul Phipps.*

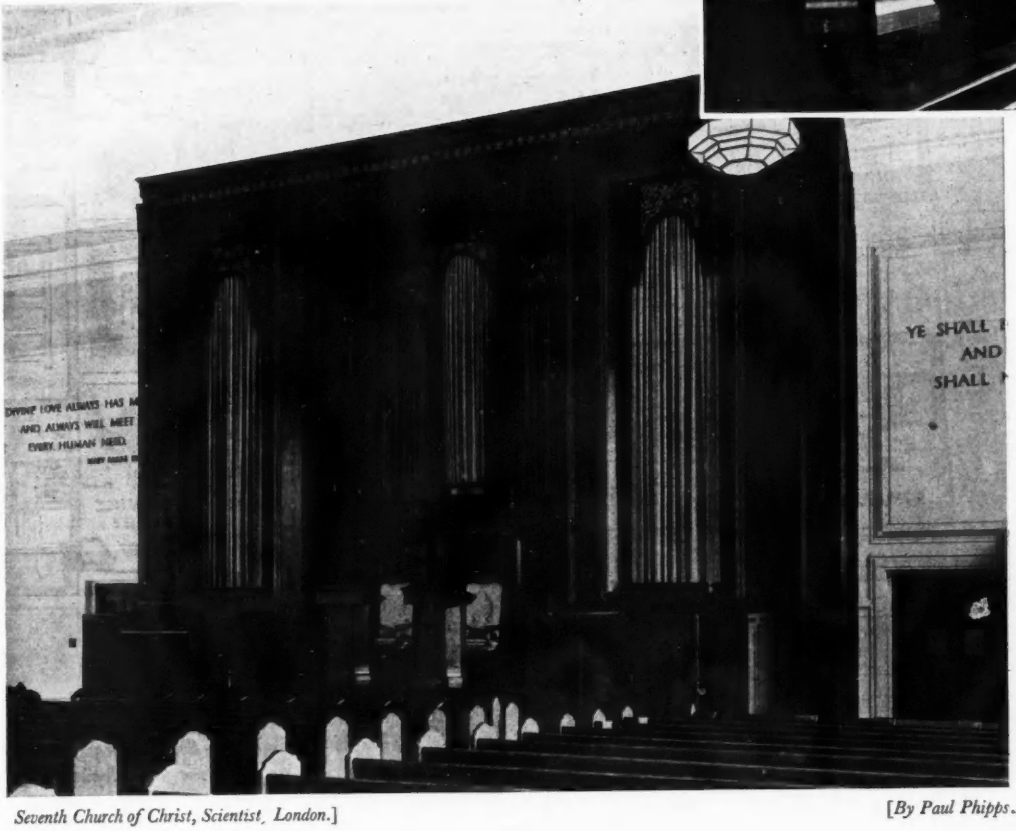
The architect's detail drawing of the organ case. The carvings on the upper part, in which vines and olives are represented, and on the Readers' chairs, are the richest features of the decorative scheme in the interior of the auditorium. Photographs of the organ and of the Readers' desks and chairs appear on the facing page.



No altar is used in the Christ Scientist church. The central position is occupied by a platform on which are two desks and chairs, for the use of the Readers who conduct the service. The general disposition is seen from the photographs reproduced on this page, of which that below shows the desks on a larger scale.



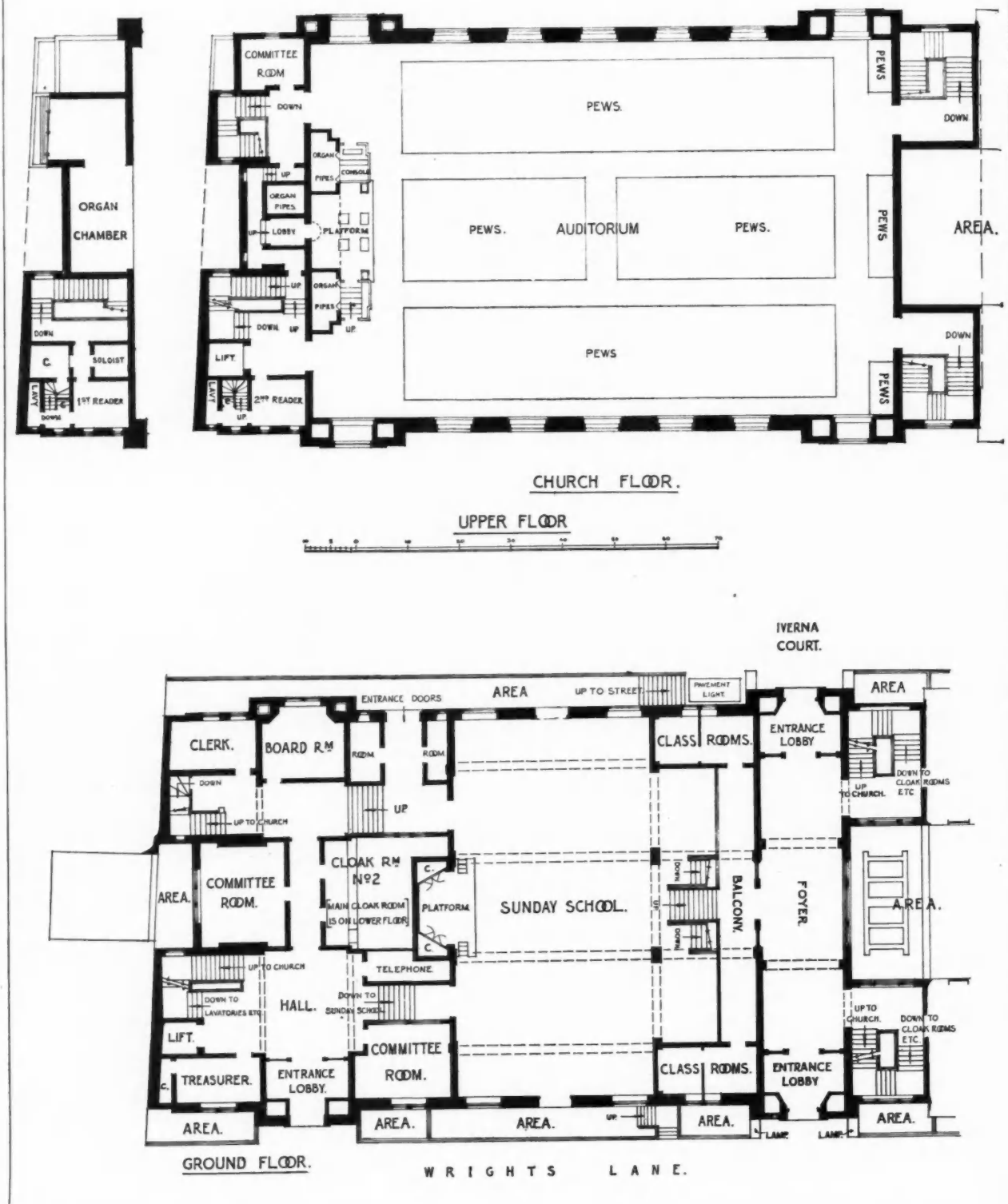
Auditorium of the church, looking towards the platform and organ. The walls are cream in colour, and the carpet is peach, approaching orange; the pews and the organ-case are in natural oak.



Platform and organ-case. The organist sits in the small enclosure on the right. The corresponding enclosure on the other side contains steps up to platform. Curtains temporarily fill the pipe openings.

Seventh Church of Christ, Scientist, London.] [*By Paul Phipps.*

The architect's detail drawing of the organ case. The carvings on the upper part, in which vines and olives are represented, and on the Readers' chairs, are the richest features of the decorative scheme in the interior of the auditorium. Photographs of the organ and of the Readers' desks and chairs appear on the facing page.



Seventh Church of Christ, Scientist, London.] [*By Paul Phipps.*

Plans of the ground, church, and upper floors. Seats are provided in the auditorium on the church floor for nearly 1,000 persons, and in the Sunday school for over 400. The auditorium is 112 ft. long by 72 ft. wide, the floor sloping 1 in 17.

ARKWRIGHT HOUSE, MANCHESTER

DESIGNED BY HARRY S. FAIRHURST

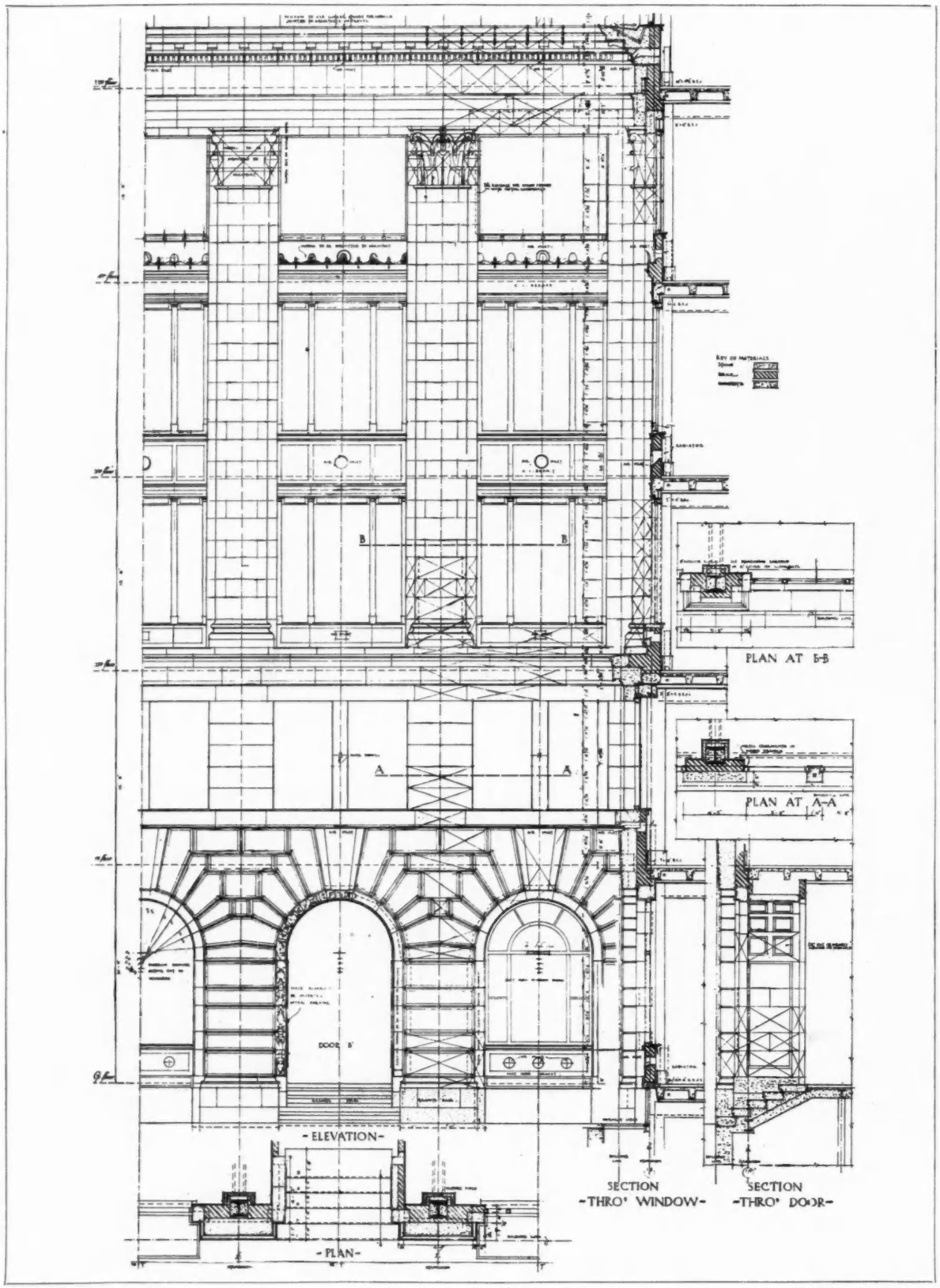


Southgate front. The building has been built for the English Sewing Cotton Company. The main façade (see page 797) faces Parsonage Gardens, and can be seen as a whole from some considerable distance. All the principal elevations are in Portland stone.

THE new building for the English Sewing Cotton Company faces the Parsonage Gardens, where the Church of St. Mary once stood. Consequently, the site is a valuable one architecturally, owing to the fact that the front elevation of the building can be seen as a whole from a viewpoint a reasonable distance away. The building comprises sub-basement, basement, ground, and seven upper floors, the sub-basement being devoted to heating chamber and machinery space, and the top floor to a caretaker's flat.

The front elevation is designed in Portland stone in the Classic manner, with pilasters facing Parsonage Gardens. When completed, this elevation will have a symmetrical architectural treatment. Advantage has been taken of the approach to the building by St. Mary's Street. The main entrance is situated at the end of the building facing this street, and is marked by a pavilion having two detached columns. The Southgate frontage and the Parsonage frontage are also in Portland stone. The back of the building is designed in buff-coloured brickwork, with artificial stone dressings.

The ground floor halls and corridors are in Roman stone, and the staircase is tiled, and has terrazzo steps and bronze balustrades. The woodwork finishing generally is mahogany. There are four high-speed lifts, and one staff and goods lift. The heating apparatus is designed for low-pressure hot water, and a vacuum-cleaning installation is provided. Ample lavatory accommodation for both sexes is provided on each floor of the building.



Arkwright House, Manchester.] [*By Harry S. Fairhurst.*

The architect's working drawing of part of the main front from ground to cornice levels (fifth floor).



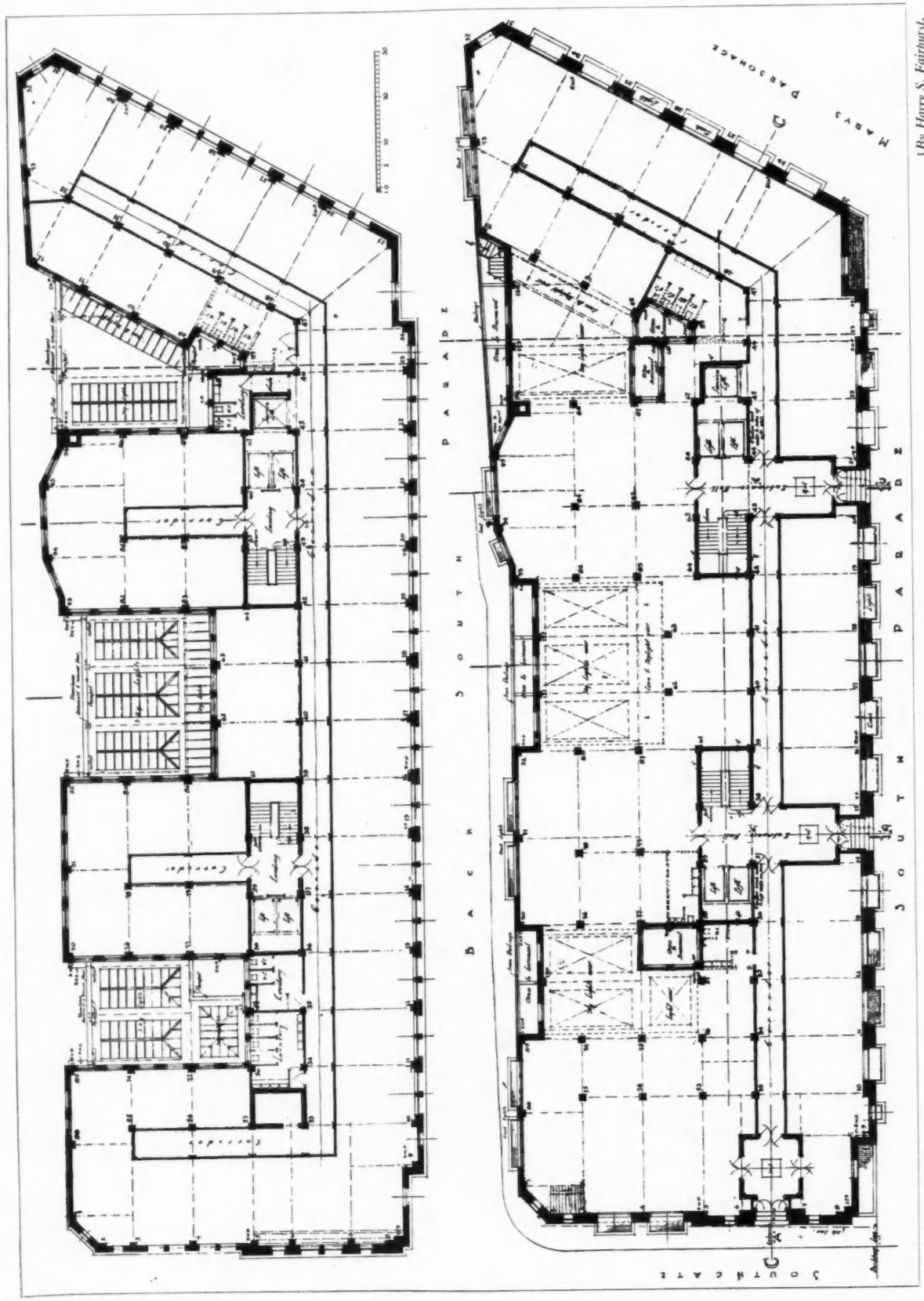
The main front is designed in the Classic manner, with pilasters facing Parsonage Gardens. The right-hand portion of the building has yet to be erected. When this is completed the elevation will be symmetrical in architectural treatment.





Arkwright House, Manchester.] [*By Harry S. Fairhurst.*

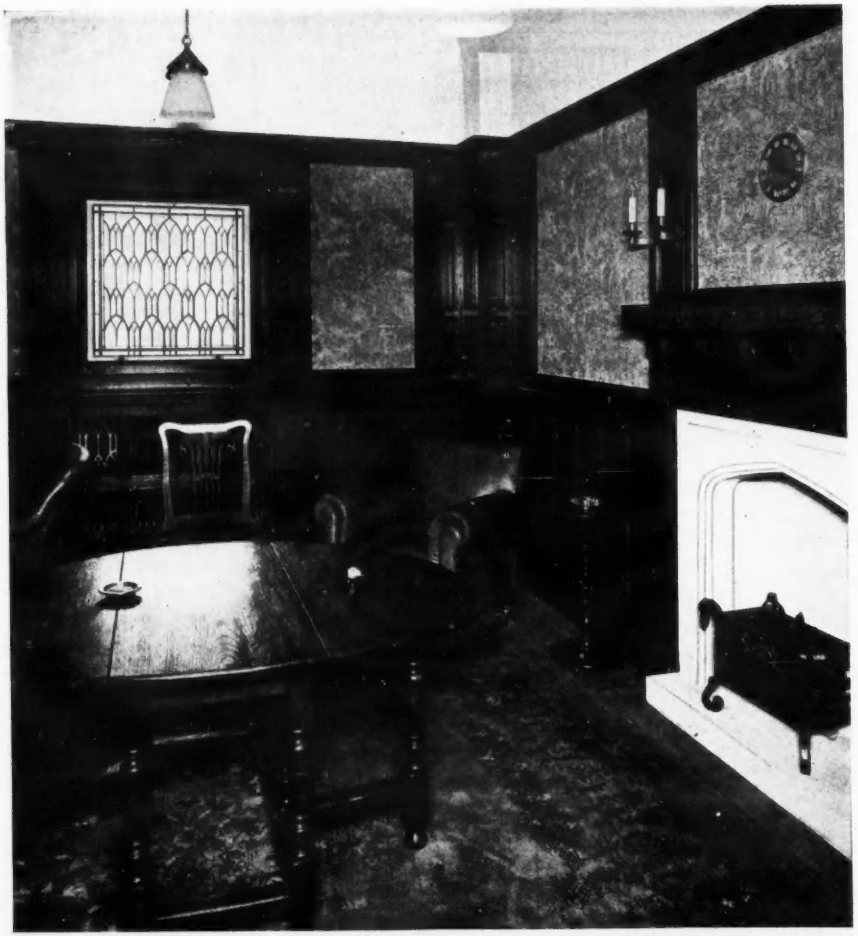
Entrance doorway in Southgate ; and entrance hall, looking towards the street. There are two such halls : that shown is the right-hand one, looking at the main front. On the left of the photograph are the lifts, and on the right, facing them, is the staircase.



Arkwright House, Manchester. [*By Harry S. Fairhurst.*

Ground and first-floor plans. The building is planned with a long main front to South Parade, with four projecting bays at the back. At present three only of the bays are complete, the splayed right-hand portion having yet to be erected. These projecting bays begin at first-floor level, and enable efficient lighting to be obtained to the innermost parts of the interior. The corridors, staircases and lifts are planned to ensure, no matter how the floor space is partitioned off, quick and easy access to and from the building.

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Arkwright House, Manchester.]

In the chairman's room a linear motive is introduced, wood panelling being used as the main decorative feature in combination with printed fabric wall covering. The window is fitted with leaded lights. As in most modern buildings synchronized clocks have been installed and incorporated in the architectural design of the interiors. Below the window is seen a grille which screens a built-in heating radiator.

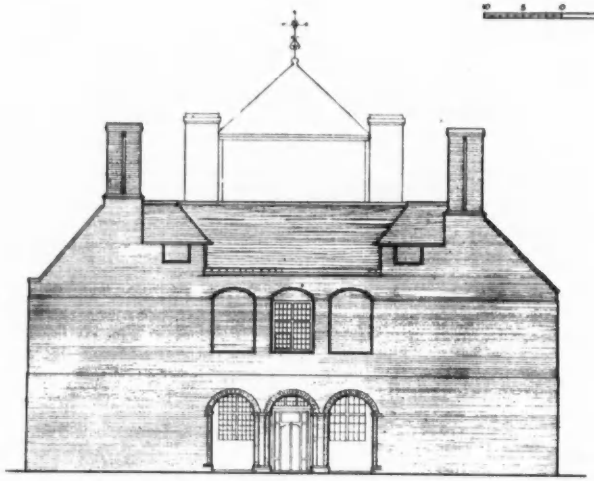


[By Harry S. Fairhurst.

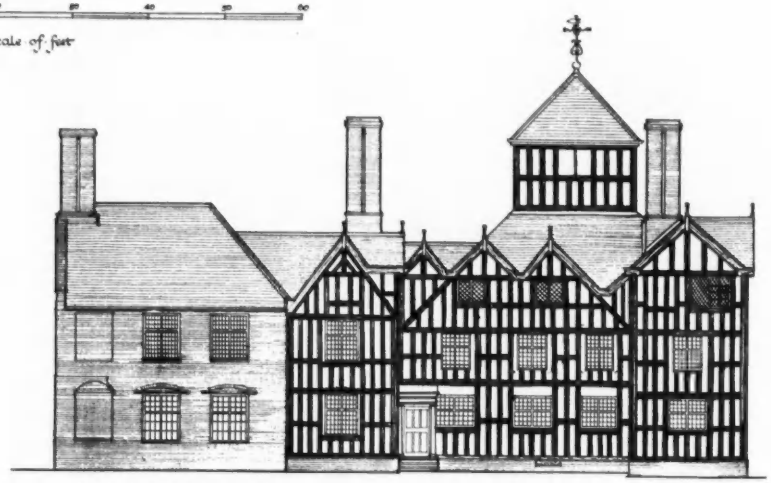
Features of the boardroom include the interesting semicircular-headed windows and the pilaster treatment of the walls. Note how the design of the clock surround over the fireplace takes cognizance in an agreeable way of this treatment: in this instance the opening is occupied by wood veneers, carefully paired, to give a diamond pattern. Heating panels are in the dado below the windows.

LYMORE HALL MONTGOMERY





South Elevation



East Elevation

This drawing and its fellow on the opposite page will be followed, in our next issue, by further measured drawings of details to a larger scale, with some account of the features they illustrate.

Lymore Hall, near Montgomery, the property of Lord Powis, whose letter concerning its fate appeared in our issue for October 2, was put up to auction three weeks ago and realized £3,600, the offer of £10,000 for its preservation as a relic, through the medium of the National Trust made at a late date, being considered insufficient. Its architectural history presents a problem, inasmuch as its style is indubitably Tudor, whereas it is known to have been erected in 1675 by Edward, third Baron Herbert of Cherbury. The theory held by experts of the present day is that much of the material came from Montgomery Castle, dismantled a few years previously.



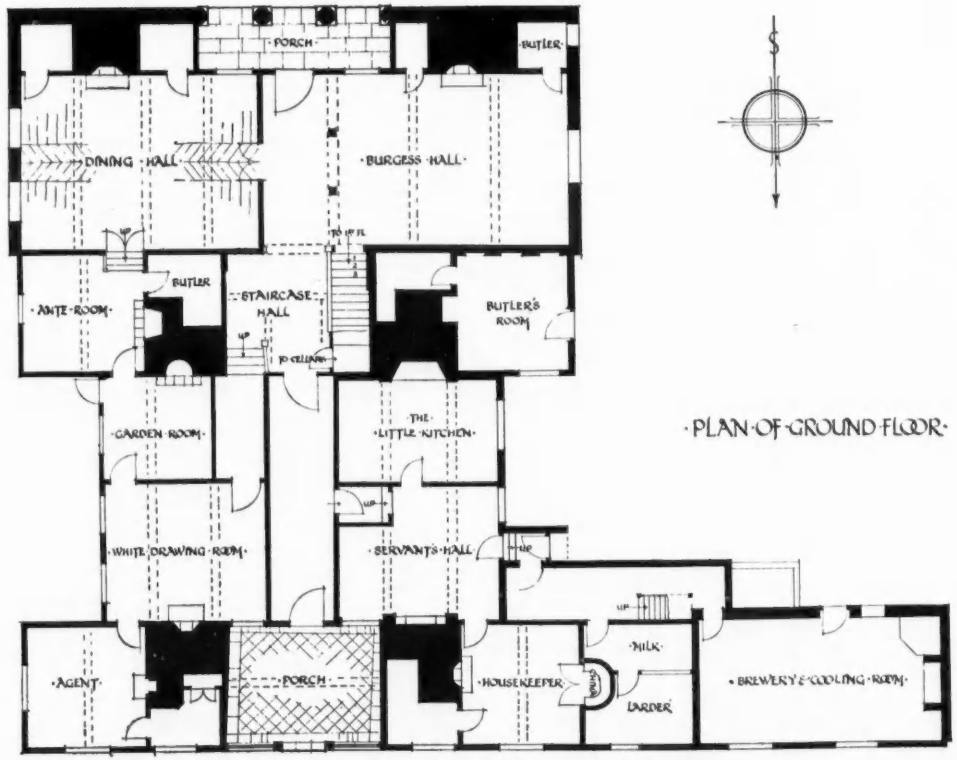
North Elevation

Measured by:- Alwyn B. Waters & D. G. Martin
Drawn by:- Alwyn B. Waters
October-November 1929

dismantled a few years previously.

Measured by :- Alwyn B. Waters & D. G. Morton.
Drawn by :- Alwyn B. Waters.
October - November 1929.





PLAN OF GROUND FLOOR



PLAN OF FIRST FLOOR

There is no doubt that portions of the work date from 80 to 100 years earlier than 1675; moreover, the oak stretchers behind certain tapestries were found to have been carefully numbered in Roman numerals, as if with demolition and re-erection in view. The north elevation originally had six gables, but the three shown were substituted, and a wing pulled down, in the course of extensive rebuilding of the roof in 1794.

The names given to the apartments on the plan drawings are those by which they were known at the time when the house was last inhabited—about forty years ago.

Measured by: Alwyn B. Waters & D. G. Morton.
Drawn by: Alwyn B. Waters
October - November 1929

THE ARCHITECT

His Beginnings and Ends

A SELF-PORTRAIT BY CLOUGH WILLIAMS-ELLIS

Hereunder is presented the first of three autobiographical episodes. They are part of the material that has gone to the making of Mr. Clough Williams-Ellis's book, The Architect, *that Geoffrey Bles is publishing on November 27, as the first of the new* Life and Work *series. Here the author recounts with zest the circumstances of his first commission.*

i: The Architect in the Making

THE accepted process for the making of an architect is either the traditional one of articled pupilship or the newer and usually more effective one of study at a recognised architectural school. The training in each case occupies from three to five years, and ends with examinations for admittance into the Royal Institute of British Architects.

Thereafter the novice would normally try to enter the office of some architect of repute as a junior assistant; and, having there gained such practical and business experience as the place afforded, would seek further experience and an increased salary in some other office where the work was more or less in line with his own particular bent and predilections. Then, if he seemed to see the chance and had a commission or so to start on and something to live on until fees began to come along, and if, further, he had sufficient self-confidence and that necessary dash of recklessness, why, he would set up on his own as an independent practising architect.

That is the correct approach to professional practice, straight, broad, gently graded in a smooth incline up the inevitable hill, and undeniably *long*. Still, by the time one has traversed this architectural processional way and reached its end and been admitted through the successive examination-gateways, and rubbed shoulders and exchanged ideas with the other pilgrims, one is bound to know quite a bit about architecture and building and to be, technically, pretty well equipped.

Not, as I hold, that the highly-finished product of this elaborate process will by any means be, at the end of it all, an architect, as I would have the term understood, unless he has all along had the root of the matter already in him as part of his original make-up, like his love of cats or his detestation of tomatoes. Granted that our architect has been thus born, this is doubtless the surest way of then making him—of bringing him to flower. Indeed, so efficient is the modern machine for the production of architects that there is the obvious danger that we may (and indeed do) get a certain proportion of architects turned out who are purely or mostly synthetic—young men who were born to be stockbrokers, soldiers or dentists, and who have been somehow deflected from their proper destinies.

Yet that is no great or peculiar reflection on the machine itself, which, after all, only undertakes a process, and can clearly only reject unsuitable material in a rough and general sort of way, and does do its appointed job in a remarkably thorough fashion.

Even the congenital stockbroker must be the better for his machining: he could not possibly thereafter tolerate the house of his stockbroker father, if he were of the true Victorian breed and had at all a suitable home. The architecturally educated son might well help to make a unit of good public opinion, even if he would never make a good architect; and that is something.

To the congenital architect, with his arms wide open to receive whatever may be going in the way of enlightenment, the machine is a chariot of destiny—a celestial omnibus—of which he will have little to complain save that it travels too slowly for his ardent spirit. But in that chariot or omnibus I myself never travelled beyond the first twopenny stage, when, as I shall tell, the conscientious conductor pushed me off into the roadway, firmly but not unkindly.

My second term at the Association school had run but a week or two when, through family jobbery, I was offered a small architectural commission. As the fee proposed (and eagerly accepted) was to be ten guineas, including all expenses, that description is doubly appropriate. What I was required to build was a country home for a charitable institution, to house some twenty inmates, that had to be as cheap as plainness and ingenuity could make it, yet as attractive, granted that, as I could contrive.

An actual job! I was going right now to direct the laying of actual bricks in veritable mortar for the due mixing of which *I* should be solely and even legally responsible as ARCHITECT. There would be a real working plan with my name upon it, pinned to a board and getting stained with mud and washed by the rain on a real building job, the builder and the foreman and the workmen all believing in it and obeying it just as though it were *really* real. I should be believed in and accepted as an architect, by this small circle at any rate. Should I by any means be able to justify or maintain this faith, the very existence of which might somehow, magically, endow me with the wisdom and power that seemed properly to belong to my high calling?

True enough, I was very young, ignorant, and utterly inexperienced, yet probably I already knew enough to manage this affair without disaster, perhaps even with credit. Where knowledge failed, I could no doubt temporarily bridge the gap by an airily-constructed bluff until inspiration or information, feverishly acquired, were ready to take its place.

Assuredly I would take it on, and somehow I would get away with it. After all, if I failed, my failure would be only relative to my clients—to me, however, absolute, disastrous. By employing as their architect, at a purely nominal fee, an obscure young man, they clearly, and perhaps properly, risked the wasting of part of their small funds and the erection of a building less excellent than it might have been. Yet to me at the time it seemed that the great risk was really mine. If things went seriously wrong, could my career ever recover from a false start at once premature and disastrous? Perhaps not, but then why envisage disaster? Why should one fail? After all, one had common sense, zeal, and a flaming determination to triumph; so why shouldn't one?

It was in this state of but slightly hesitant elation that I accepted my first commission, though realization of what the almost instant repercussions would be upon my life might well have given me pause. As I might have foreseen, the planning and carrying out of even a small building soon began to demand a considerable part of my time and attention, and the fact that its site was far away in the country, and that I was taking each and every step hesitatingly and for the first time, added to the laboriousness of the affair and to my absences from the school. Furthermore, the builder and the providers of this and that would seek me out during school hours, sometimes penetrating to my very desk, to the grave prejudice of all order and discipline.

It was scarcely to be wondered at, therefore, when, after a perfectly friendly interview with the principal, I received a formal letter requesting that either I should cease to use the school as my office, or resign forthwith in the interests of the other students, to whom my highly irregular behaviour could not but prove upsetting. This demand seemed to me entirely just and proper, and whilst I expressed my genuinely-felt regret at leaving a friendly nest in so unfledged a condition, I added that I felt just *having* to fly would somehow produce the requisite wings and that, anyhow, as I had always understood that a "first job" was generally hard to come by, I proposed to cling on to what had so unexpectedly come my way—and chance it.

So, with no more than a ten-guinea fee in prospect at the end of some five or six months of further labour, I cheerfully cut myself adrift from the training ship, trimmed my tiny sail to this little favouring puff, and just hoped that heavy weather might providentially hold off until I had somehow picked up enough sea-sense to navigate my cockleshell into port, there to re-fit for larger and even more dazzling adventures.

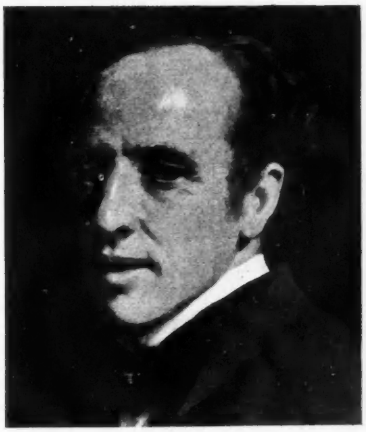
I recall that at this time my elder brother and I were sharing chambers in Cork Street, Burlington Gardens, which, complete as they were with private bathroom and valet, strike me in retrospect as quite improbably fashionable and extravagant. Yet, there we undoubtedly were, running mildly into debt and wondering, also quite mildly, where we should each be and what doing half a year on.

Now that I had a building job to carry out and was therefore presumably already an architect, it seemed necessary that I should have an "office" in which to prosecute my profession on however miniature a scale. Picture me, therefore, a week or so later, in a little cupboard of a room, approached grandly enough from the sedate precincts of Gray's Inn, but looking to the back into the drab hurly-burly of the Gray's Inn Road. To open the window was to be deafened by the clanging of trams and the thunder of drays and lorries, and to admit little eddies of dust and straw that would quickly form a grey deposit upon my desk and drawings. Still, it could be called an office: it had my first visiting card—addressless and clubless—pinned to its door; some deal boards fixed below the window gave me a drawing desk; whilst a drawing-board, my instruments, half a dozen books and a few shillings' worth of paper completed my professional equipment.

I was realist enough to discount the possibility of any "client" seeking me out in this obscure retreat, and I therefore sternly repressed any carnal longings I might have for such superfluous elegances as a chair or stool, a carpet, or even a waste-paper basket.

I paid five pounds a quarter for this office of mine to a grown-up architect who had it to spare, and from whom I understood occasional if monosyllabic advice might be sought, though that heartening expectation was scarcely realized. In the first place, he was no doubt preoccupied with his own affairs when not actually away on some job or other; and in the second place I think he deeply disapproved of me, as any orthodox and properly qualified architect very well might.

Who, pray, was this ignorant, yet apparently assured young gentleman, to go setting up thus precociously as an architect? Did he think to vault thus easily into practice over the heads of his elders and betters, with no more



Mr. Clough Williams-Ellis, the author of these reminiscences.

than his amateur enthusiasms to set against their long and laborious apprenticeship? Would it not, after all, have been wiser to have foregone the five pounds a quarter and to have left the store-room empty, rather than seem to be countenancing or encouraging so unprofessional and therefore so undesirable an adventurer?

Yes, it was a mistake; and if the discreditable tenant could not actually be evicted, one could at any rate seem not to be aware of him, and make it clear to all that no responsibility was accepted for his deplorable escapade by consistently discouraging his approaches and by snubbing him whenever he dared to seek advice!

So snubbed I was, well and truly, but never seriously discouraged. Yet I do not think my landlord wished me ill; austere, taciturn, and architecturally hard-bitten himself, my rather glib and *débonnaire* assumptions would have been well enough calculated to exasperate him, and he no doubt thought that cubbish superficiality should be met and cured by disapproving contempt. Even so, I did get occasional crumbs of help from him by sheer importunity.

On my third visit to my one and only job, there took place this dialogue:

Builder (nervously jocular): "What about a little sugar for the canary? Can't sing without sugar, you know!"

Myself (anxiously): "Canaries—sugar—what do you mean?"

Builder: "Well, sir, what about a draw—a little on account—could you send me a certificate, say, for a hundred or so?"

Myself: "A certificate? Why, of course—certainly. I will see about it."

Then on my return to London this sequel:

Myself: "My builder has asked me for a thing he calls a 'certificate'—something to do with his being paid—what does he mean?"

My Landlord: "Don't even know that? Was there nothing about it in the contract—if yer had one—or likely you didn't get that far in yer four months' schooling? See here. . . ."

And so it was that I became initiated into this mystery of *The Architect's Certificate Book*, with its counterfoils and serial numbering; and so it was that I contrived, by hook or by crook, to solve or get solved such other professional or technical problems as were too high for my little learning or my mother wit—and, luckily for me, always just in time, or, rather, just not too late.

£160 a year, paid monthly, was scarcely a luxurious allowance for a young man in London, even twenty-five years ago, and I had had to pay my own architectural school fees out of it, and now my office rent and expenses, as well as my board and lodging and all the rest. It was therefore not surprising, nor, I think, profitless, that I quite often found myself exceedingly short of money and sometimes entirely without it.

At this period my only two readily negotiable assets—my watch and signet ring—would occasionally find themselves in pawn or left at a railway booking-office in pledge for a ticket. Sometimes I would miss my train through not being able to afford a hansom, and the resulting complications would perhaps be aggravated by my not having the money for an explanatory telegram, or for one sufficiently long to be clear.

There was, no doubt, a streak of native vagueness that partly accounted for such occasional straits, but it did undoubtedly require some rather agile egg-dancing to maintain oneself and

at the same time to launch one's little professional barque on so very slender an income. For one thing, whilst I had certainly not been brought up luxuriously, we had all lived very well and comfortably at home, and in a certain style, and I was quite without the technique that seemed to enable people to be relatively quite poor and yet live a life not merely decent but obviously jolly.

However, it was not very long before I discovered that theatres had pits, and even galleries ; that there were places in Soho where you could dine, amusingly enough if not very well, for as little as fifteen pence; that a starched shirt might often attend more than one dance or dinner-party without discredit, given a little care and luck ; that there was nothing inherently shameful in travelling third-class, and that the servants in even quite grand country houses would accept quite meagre tips with cheerfulness if one added friendliness to the silver.

Anyway, one way and another, I "contrived," running my little one-man show, going out and about quite a deal.

And now, by the sort of sheer good luck that I had had no right to count upon (yet had, I suppose, in fact, counted upon when I so imprudently set up in practice), along came a nice trickle, small to begin with but rapidly growing, of useful little jobs. My "number one" behaved, indeed, most laudably like a rabbit, when, itself scarcely complete, it yet began to breed with precocious freedom.

Within a few months I had three or four little houses going on in its immediate neighbourhood, and soon afterwards a new wing to a rather dull old house in the next parish.

Small as these commissions actually were, the mere fact of having some half-dozen on at once meant to me a dazzling expansion of business, as well as a fourteen-hour day and a perpetual and not really efficient scurry. Clearly, I must get properly established and equipped with a telephone, and perhaps even an assistant ; one should crowd one's luck while it lasted !

So figure me removing myself and all my gear very cheerfully from Gray's Inn to the Embankment near the Temple, all in a four-wheeled cab, and at work again within the hour in my fifth-floor attic flat. Those five flights of steep stone stairs, up and down which I never passed except at top speed for the whole eight years I was there, were really great time-savers, for I needed to look no farther for my exercise. There were three enchanting attic rooms, with sloping ceilings and dormer casements looking to the sun and the tides and traffic of the Thames, a little hall, a bathroom, and an indulgent housekeeping couple on the same floor. I thought myself (and indeed was) very happily placed and at an astonishingly low rent, thanks, I suppose, to the hundred-odd steps of the stairway. Clients I did not consider. If they wanted to see me they could climb as I did. A few—quite enough—did; but usually I met them on the site or on the job, or at their own houses; and, on the whole, I still think that is generally the more efficient plan.

Drawings really convey even less to most people than does the medley of materials and paraphernalia on the cook's table before a dinner-party, and it is considered neither necessary nor desirable that the guests should pass through the kitchen on their way to their enjoyment of what is there prepared. The wise patron having carefully chosen his chef, the menu is settled; and the artist is left to work undisturbed, to be judged by the final results and not by periodic inspections of ill-understood preparations.

The architect's case is at any rate analogous, though, like the chef, when he *does* find a real *gourmet*—someone not only with a palate but some architectural knowledge and understanding as well—ah ! it is delightful to welcome him to the secrets of the kitchen or the studio at any time, if he does not talk outside his particular dinner or his house—and does not talk too long !

Yet you will usually find out more of what it is essential you should know about your clients (if you are to build for them really successfully) by talking at large and at leisure with them than by talking shop, partly because architectural "shop" is probably new and strange to them. They are at a great disadvantage in such a conversation, and, perhaps through feeling this, they express themselves badly and may entirely fail to give you any clear, direct or practicable clues as to what they really want—or think they want.

Nor, I think, is it reasonable for the architect to expect very articulate or explicit instructions; and, even if he gets them, he may well feel that his first duty to his client is to get him to reconsider them. No, having studied his case, the architect, like the doctor, should usually do most of the telling, and—in the same way—he will expect to be trusted to prescribe wisely and successfully.

That is why the architect must get to know his client (at any rate up to a point) as well as he possibly can—as well as the family lawyer and doctor rolled into one ; and that is why I think he is most revealingly seen at home or at his club, or almost anywhere rather than in the architect's office, where he is at so obvious and unfair a disadvantage.

[NEXT WEEK : ii—
INTERLUDE (1914–1918)]

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

MR. GREENWOOD, the Minister of Health, informed Mr. Remer that the approximate capital value of the Exchequer subsidy in respect of houses erected during the quarters ended June 30, 1929, and September 30, 1929, was £2,500,000 and £4,000,000, respectively.

Separate figures for non-parlour and parlour houses were not available.

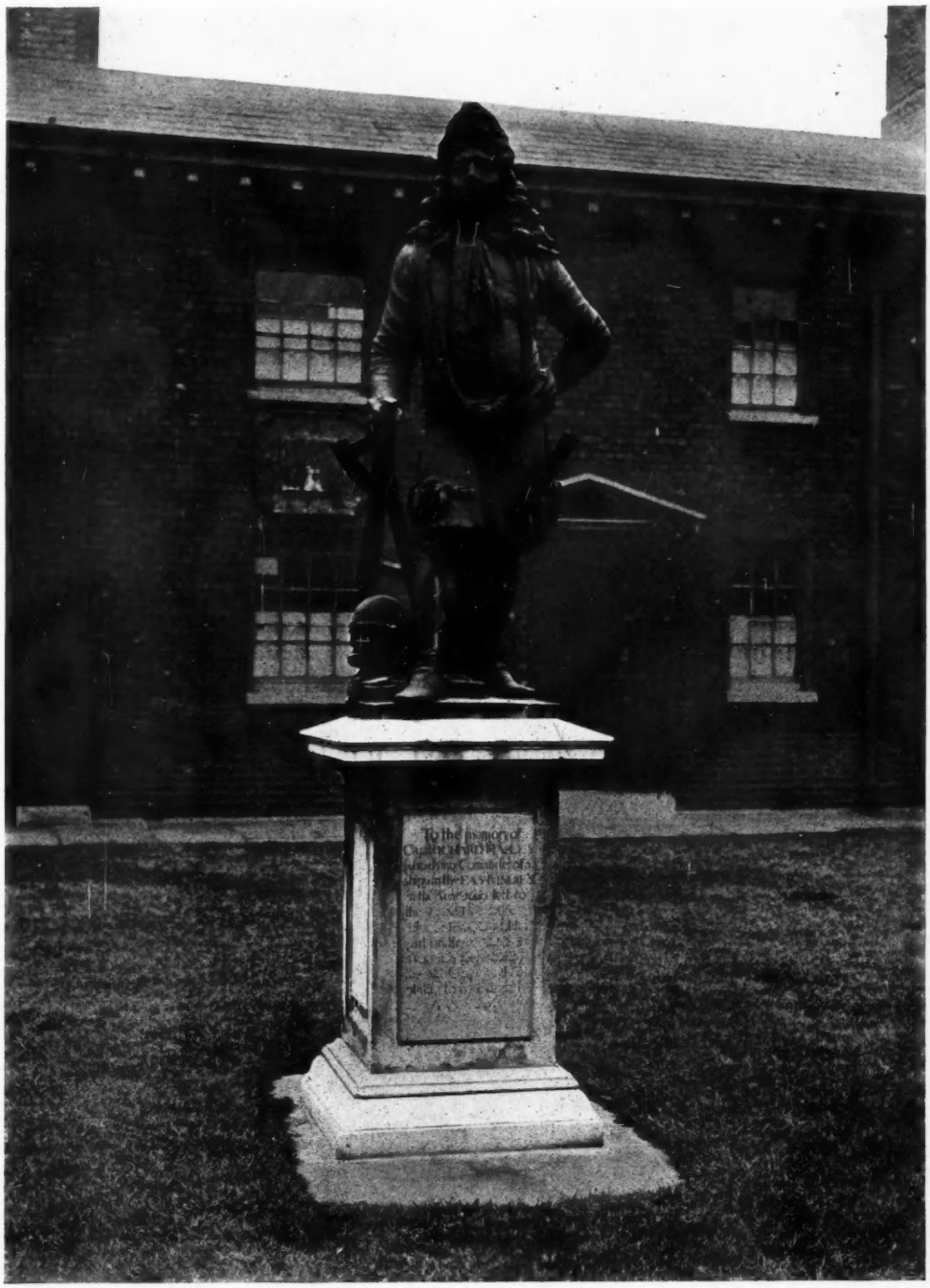
Replying to Mr. Hurd, Mr. Greenwood said that up to September 30 last, the latest date for which figures were available, assistance had been promised under the Housing (Rural Workers) Act in respect of 2,200 dwellings. Work had been actually commenced on 2,034 of these, and completed on 1,402. The number of houses built under the Act up to September 30 last was 14,487.

Mr. Simon asked the Minister of Health whether he was aware that the Report of the Committee on the Prices of Building Materials for the three years ending July last gave no information as to whether any prices are unduly high; and whether he would arrange for a further Report giving this important information.

Mr. Greenwood said that the terms of reference to the Committee required them to report on prices which appeared to be unduly high by reason of the operation of any trade combination, trust or agreement. He had no reason to suppose that the Committee had overlooked this part of their reference. They had reported with regard to it from time to time.

Mr. Mills asked what measures had been taken to prevent nuisances by wasteful fumes from cement factories; and what was the comparative waste as between German works and British works.

Miss Lawrence, who replied, said that the emission of fumes was usually kept well in hand ; the emission of dust gave more trouble. A good deal had been done, and experiments were being conducted for dealing more effectively with the problem. Inspectors of the Ministry of Health were in close touch with what was being done. She could not at present say how works in this country compared with those in Germany.



ENGLISH PRECEDENT No. 90

STATUE AT TRINITY ALMSHOUSES, MILE END ROAD, LONDON

The illustration shows a portrait statue of Captain Richard Maples, who died in the East Indies. He it was who made a bequest to the Corporation of Trinity House. As a work of art the statue is typical of the late seventeenth century. The details of the costume are remarkably accurate. We admire it as an example of decorative sculpture, expressing the character of its age, as well as for the piquant contrast it offers to the austere buildings. It was, in fact, first erected in the grounds of the Corporation's Almshouses in Deptford in 1681, and removed to its present position on their demolition in 1875.

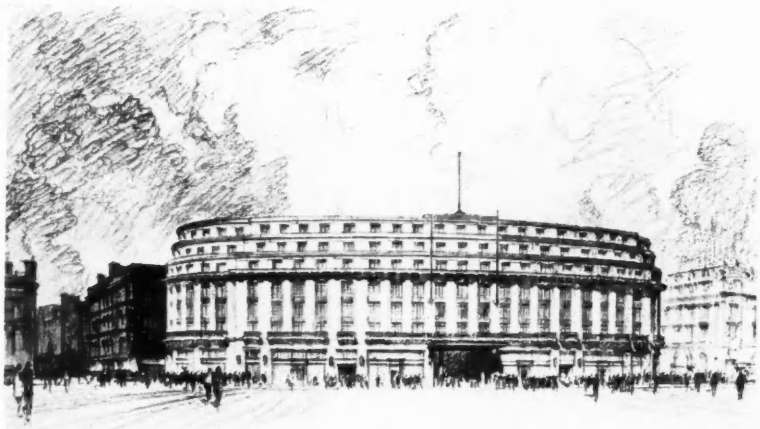
—[A. E. RICHARDSON.]

BRADFORD IMPROVEMENT SCHEME COMPETITION

FIRST PRIZE-WINNING DESIGN: BY C. COWLES-VOYSEY

ON this and the following two pages is illustrated the design of Mr. C. Cowles-Voysey, awarded the first premium in the Bradford Central Area Improvement Scheme Competition. Owing to our special cinema issue appearing last week, we were reluctantly compelled to withhold publication until this issue.

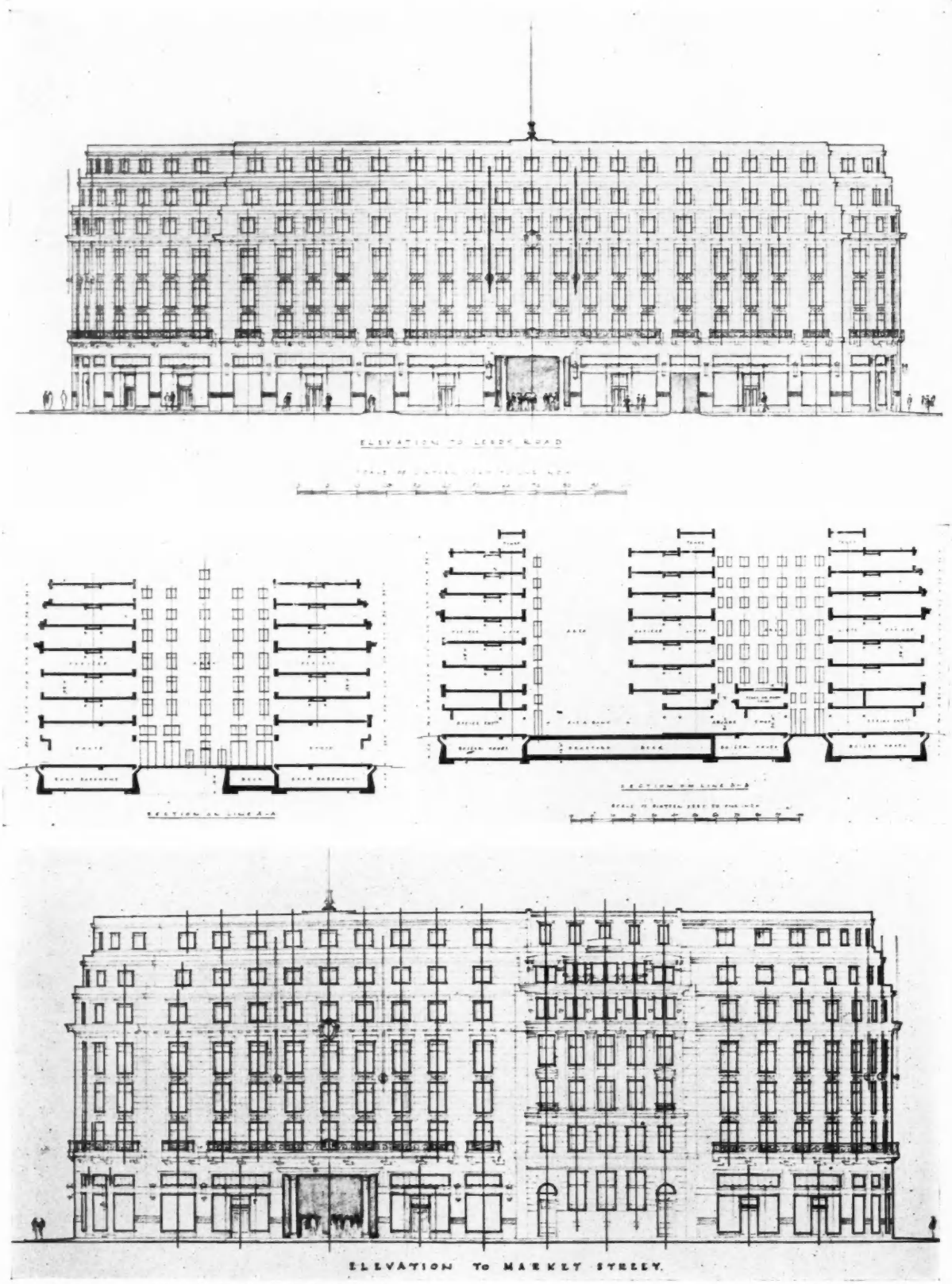
The island site on which it is proposed to erect the buildings is situated in an important part of Bradford. The scheme is planned in three divisions: in such a manner that any one of them can be built with or without the portions immediately adjoining it, and so that when the whole of the site is covered, the three portions will form one complete building. In the winning design provision has been made for shops on the ground floor, with upper floors devoted to offices, etc. The first premium was £500. The second premium £200, and the third £100, were awarded to Messrs. Arthur D. Bailey and D. H. McMorran, and Mr. T. Harold Hughes, respectively.



A general view of Mr. C. Cowles-Voysey's perspective sketch, which the promoters of the competition requested him to make after the assessor's awards were made. The buildings are six stories in height, with the three top stories set back. It was stipulated in the conditions that the façade should be in stone.

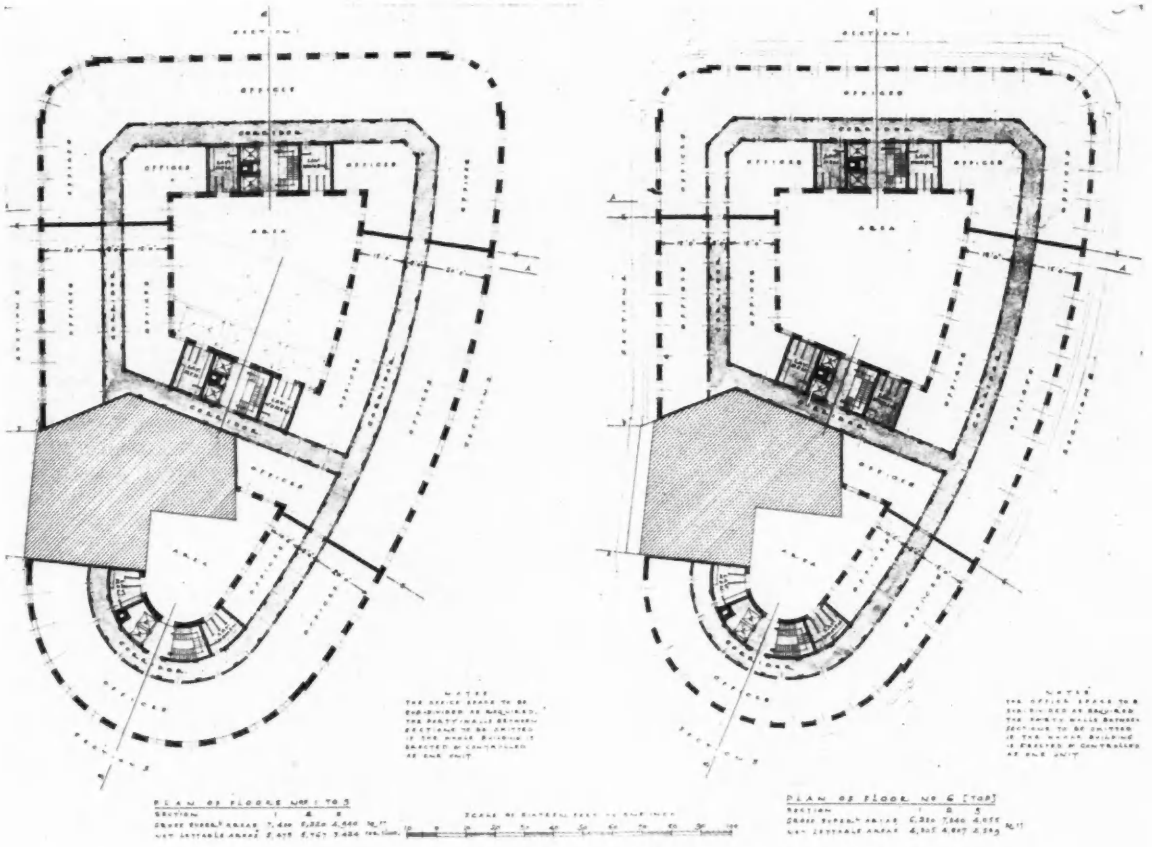


Elevation to Bank Street. The site is bounded by Market Street, Bridge Street, Leeds Road, and Bank Street. Shops are provided on the ground floor, and offices on the upper floors. The entrance to the offices is in the centre of the façade. The assessors were Professor S. D. Adshead, and H. V. Ashley and Robert Atkinson.

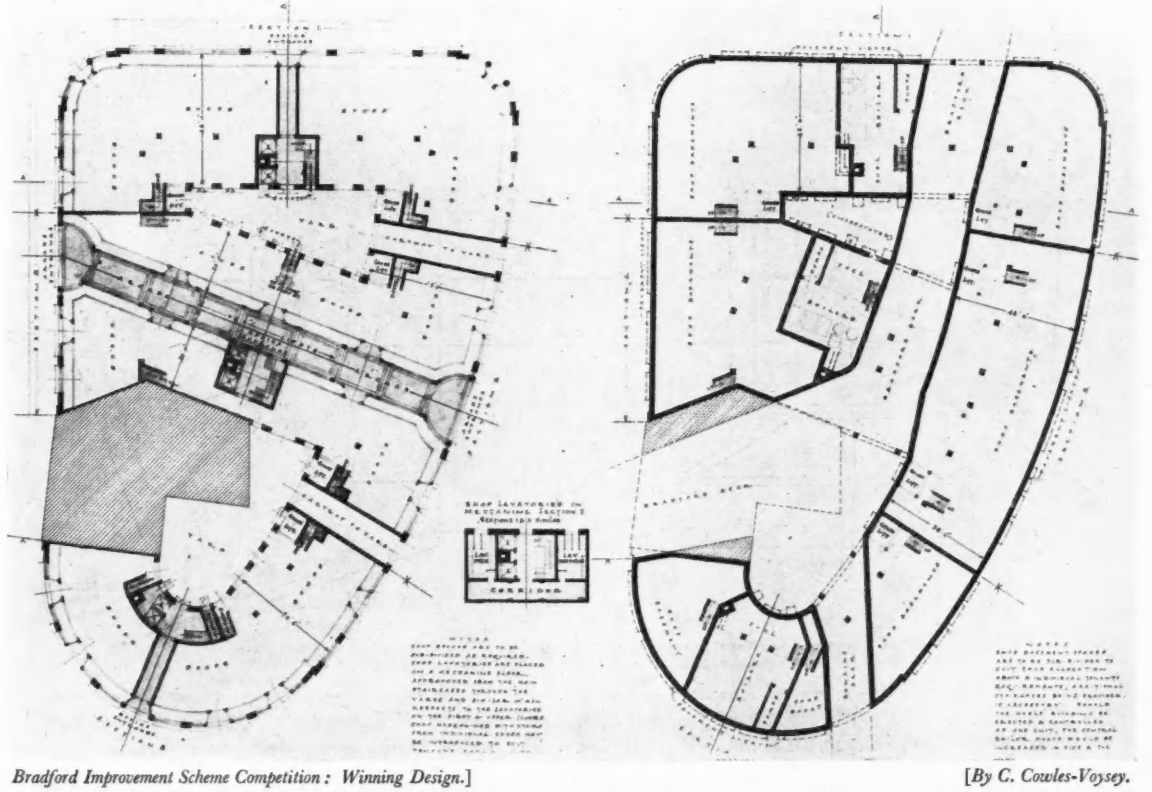


Bradford Improvement Scheme Competition: Winning Design.] *[By C. Cowles-Voysey.*

The elevations to Leeds Road and Market Street; and longitudinal and cross sections. One of the chief difficulties in the design was the retention of the site, shown hatched on the plans on the facing page, occupied by the new premises of the Anglo-South American Bank, Ltd. The yard at the rear of these premises has been provided with an entrance in Leeds Road.



Typical upper floor plan ; and sixth floor plan. The upper floors are chiefly allocated to offices.



Bradford Improvement Scheme Competition : Winning Design.] *[By C. Cowles-Voysey.*

Ground and first floor plans. The site is planned in three divisions ; in such a manner that any one of these sections can be built with or without the portion immediately adjoining it, and that when the site is covered they will form one complete building. An arcade runs through the centre of the site from Leeds Road to Market Street.

OPTICAL WORKS IN THE CITY

DESIGNED BY GEO. T. MORRIS

THE site of the new building for Messrs. J. and R. Fleming, Ltd., Clerkenwell Road, London, is almost entirely surrounded by existing property, the only actual road frontage being on to Back Hill. Numerous difficulties had to be faced when the building operations commenced. The site was previously occupied by an old four-story building, and it was obviously concluded that normal foundations for the new building would be sufficient. After the demolition of the old structure and during the process of excavations for the foundations, it was found that the subsoil was very spongy, and in many cases the earth had to be excavated for a considerable depth before a good bottom could be reached.

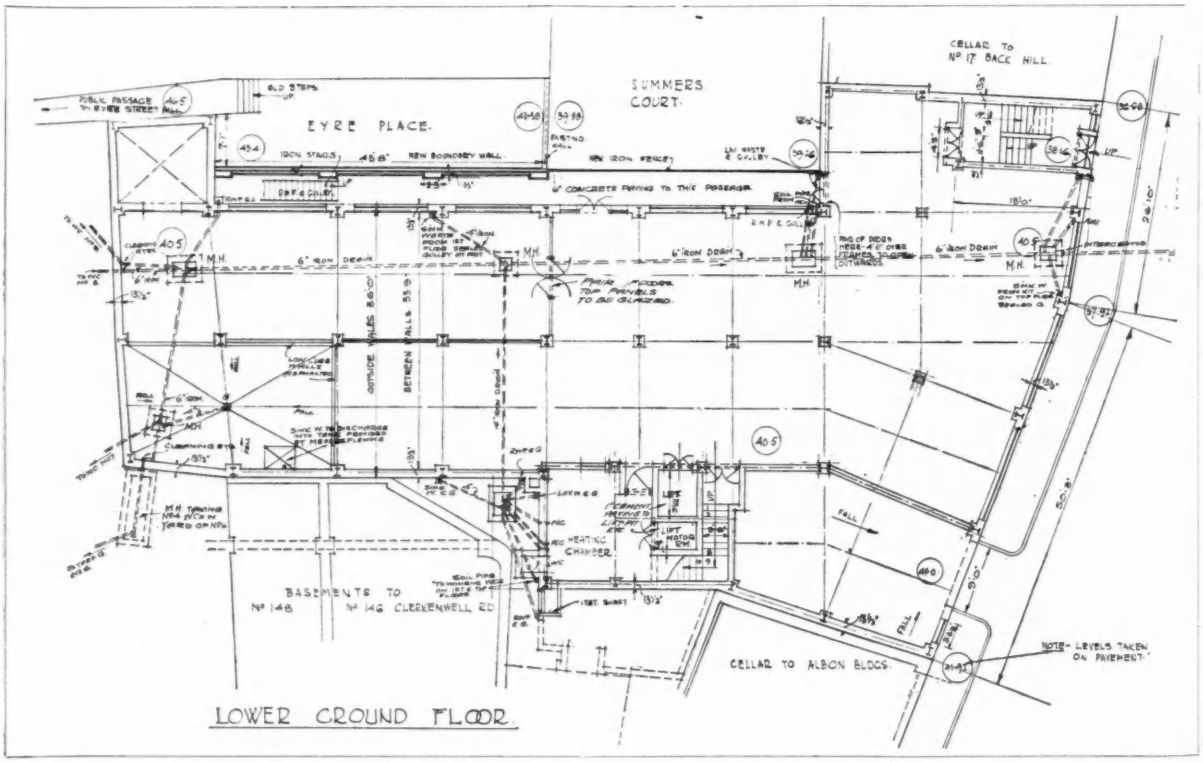
Another difficulty that had to be faced was the exposure of a number of old live drains which conveyed the drainage from the property in Eyre Street Hill. The whole of these drains had to be removed and a new drainage system with cast-iron pipes relaid under the new premises without interfering with the convenience of the occupiers of the property mentioned.

The new building is built up of steel skeleton framework, with brick panelled walls and reinforced concrete floors. The external walls are relieved with concrete string courses finished in white Portland cement, and the wall facing Back Hill is faced with red sand-faced bricks, with concrete sills and similar string courses. In addition to the staircases a lift is provided to serve all floors.

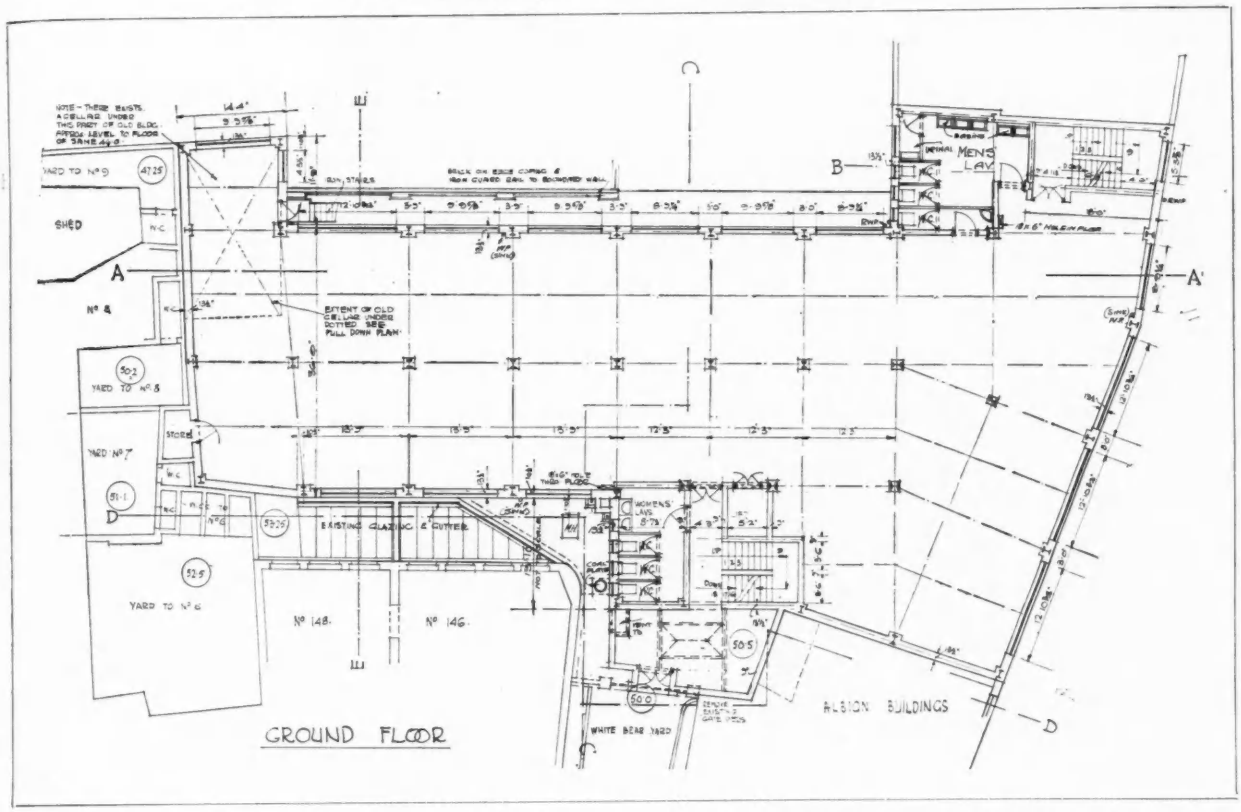
It is interesting to note that the building is planned without one square external wall. This was done to provide the owners with the greatest possible area of floor space for carrying on the manufacture of optical goods, lenses and general optician's equipment.



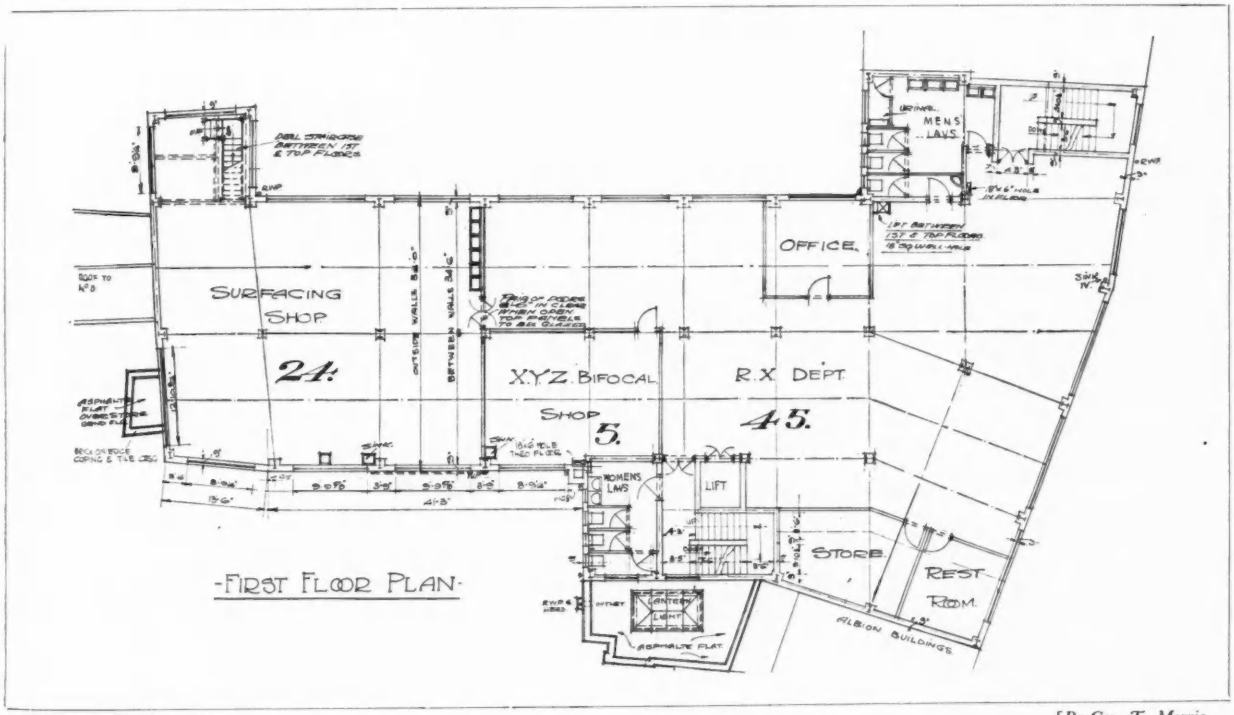
Front to Back Hill, Clerkenwell Road.



Plan of lower ground floor. The difficult site is almost entirely surrounded by existing property, the only actual road frontage being on to Back Hill, shown at the right of the plan. The greatest possible area of floor space is provided.



Plan of ground floor. The building is of steel skeleton framework, with brick panelled walls and reinforced concrete floors. Red sand-faced bricks are used for the wall facing Back Hill, the concrete sills and string courses being finished in white Portland cement.



Optical Works, Clerkenwell Road.] [*By Geo. T. Morris.*

Plan of first floor. The building is designed for the manufacture of optical goods, lenses, and general opticians' equipment. The large figures show the number of hands working in the shops. In addition to the staircases a lift is provided to serve all floors.

ELECTRIC CABLES

UNDERGROUND *v.* OVERHEAD

COMPARATIVE COSTS

By courtesy of The Electrician *we reproduce an analysis by Col. R. E. Crompton and Dr. Alfred Ekstroem of the relative costs of underground cables and overhead lines, claiming the advantage to be, in certain conditions, with the former.*

THE part of the grid which we believe to be the most important, and on which most of the Central Board's capital will be spent, is the development of the 33 kilo-volt feeders radiating from the selected power stations to distribute electricity in bulk to undertakings supplying the surrounding urban and rural districts.

Only a few years ago nobody would have thought of building these systems other than with overhead line construction, but modern engineering technique develops quickly and the cable manufacturing industry is in this respect no exception. Underground cables for 33 kilo-volts are now in extensive use, and it is only a matter for economical consideration whether these lines should be built overhead or underground.

After considering the problem, we maintain that by means of cable-laying machinery, such as that illustrated, the cost of laying the feeder cables underground can be reduced to a very low figure.

If the cable is laid at a depth of 4 ft. from the surface of the ground, it will be sufficiently protected from damage by farming operations, so that for cables up to 20 kilo-volts the cost of steel-armouring can be saved, if necessary, for economic reasons. Again, the careful handling of the cable by this laying machinery will make it possible to reduce the strengthened construction necessary when the cable is to be laid by hand.

Again, the cost of wayleaves will be considerably lower when underground cables are used instead of overhead line construction, and there will be a certain saving in the actual length of the copper conductors, due to the absence of catenary and avoidance of curves when an underground cable-line is used.

But even if, with the allowances mentioned above, the first cost of underground cables proves to be higher than that of overhead lines, this difference may be reduced by the following factors:—

(1) Underground cables have a considerably longer life than overhead lines, and, therefore, the annual depreciation cost will be reduced.

(2) There will be fewer disturbances and interruptions due to weather conditions in a supply with underground cables, and this of itself reduces the cost of inspection and maintenance, and the losses from interrupted supply.

(3) The more reliable service obtained by an underground cable supply is important to the consumers, especially for industrial undertakings.

(4) The supply by cable will improve the power factor in comparison with that for overhead lines.

Let us now assume that two places have to be connected for supply by a 33-kilo-volt transmission line of either three overhead steel-aluminium wires, each equivalent to 64·5 sq. mm. = 0·1 sq. in. copper, or, in consequence of suitable soil conditions, by an underground cable of 3 × 50 sq. mm. = 0·0775 sq. in. copper.

We assume that when using overhead lines the actual length of copper will be 22 miles = 35 km., but with underground cables it will be only 19 miles = 30 km.

FIRST COST.—1. OVERHEAD LINE.—(Equivalent to 3 × 0·1 sq. in. copper wires.)

We assume that the cost of an overhead construction as above, according to the specifications of the Central Board, will be about £1,000 per mile, to which we must add £4 4s. for capitalized cost of wayleaves per leg of the pylons. Thus :—

22 miles at £1,000 .. =	£22,000
Capitalized cost of wayleaves .. .. .. =	880
Total	£22,880

2. UNDERGROUND CABLE. — (Compounded, steel-armoured, paper-insulated, 3 × 0·0775 sq. in. copper wires, each core lead-covered.)

We assume that such an underground steel-armoured underground cable will cost £1,300 per mile delivered at the place where it is to be laid.[1] Thus :—

19 miles of cable at £1,300 =	£24,700
Cable boxes, joints, cable-laying, etc. .. .. =	3,500
Capitalized cost of wayleaves .. .. .. =	200
Total	£28,400

The first cost of an underground cable would thus be about 24 per cent. greater than that of an overhead line.

ANNUAL WORKING COST

Overhead Line.

	£
(1) 7 per cent. interest on £22,880 .. .. =	1,601
(2) 1·6 per cent. depreciation (corresponding to 25 years' life of overhead line) .. .. .. =	366
(3) 4 per cent. management and upkeep .. .. =	915

[1] Prices received from a plant on the Continent.



A machine which excavates a trench, lays electric cable at a depth of four feet underground, and fills up the excavation as it proceeds.

(4) Dielectric losses (not estimated) .. .. .. =	0
(5) Copper losses, 650 kilowatts × 2,000 hrs. = 1,300,000 kilowatt-hours at 0·6d. per unit =	3,250
(6) Losses due to interrupted service .. .. .. =	250
Total	£6,382

Underground Cable.	£
(1) 7 per cent. interest on £28,400 .. .. =	1,988
(2) 0·35 per cent. depreciation (corresponding to 45 years' life of cable) =	99
(3) 1½ per cent. management and upkeep .. .. =	426
(4) Dielectric losses (1·7 kilowatts per mile), 32·5 kilowatts × 8,760 hrs. = 285,000 kilowatt-hours at 0·3d. per unit =	356
(5) Copper losses, 716 kilowatts × 2,000 hrs. = 1,432,000 kilowatt-hours at 0·6d. per unit =	3,580
(6) Losses due to interrupted service .. .. .. =	50
Total	£6,499

These figures show that the cost of energy supplied by the Central Board to distributing undertakings may not be appreciably greater when using underground feeder cables in place of the proposed overhead lines.

This example is obviously not applicable to all parts of Great Britain. In parts where the soil is not suitable for cable laying, the costs may increase to such an extent that overhead line construction is necessary. It shows, however, that the question of laying the 33-kilo-volt feeder system underground ought to be taken seriously into consideration wherever the soil conditions are favourable.

SOCIETIES AND INSTITUTIONS

MR. C. E. VARNDELL

Mr. C. E. Varndell, F.R.I.B.A., F.S.I., who has been a lecturer at the Architectural Association for upwards of twenty-seven years, has, on account of pressure of work and indifferent health, been compelled to resign that appointment.

THE NEW DELHI

Professor C. H. Reilly, lecturing under the auspices of the South Wales Institute of Architects (Central Branch) and the Institute of Builders (South Wales Branch) at the Engineers' Institute, Park Place, Cardiff, took as his subject "The New Delhi." With the aid of a large collection of lantern slides and a great wealth of anecdote he described in detail the great scheme of layout and the planning and architectural treatment of this vast new city. He also succeeded admirably in conveying to his audience a vivid realization of the nature of the environment to which Sir Edwin Lutyens, R.A., and Sir Herbert Baker, A.R.A., were called upon to harmonize their buildings.

Prior to Professor Reilly's lecture, a short address on "The Architect in Fiction" was given by Mr. W. S. Purchon, M.A., A.R.I.B.A.

AN INDIAN INSTITUTE OF ARCHITECTS

With the help of the R.I.B.A. a Bombay Association of Architects was established some years ago and admitted as an allied society of the R.I.B.A. It was given representation on the Council of the R.I.B.A., and was entrusted with important functions in architectural education and examination.

This Bombay Association has now developed into an Indian Institute with the whole of the Indian peninsula as its province, and it is hoped that before long it will have branches in Bengal, Madras, the United Provinces, and the Punjab.

In the field of architecture the circle of Imperial organization is now complete, and the Indian Institute takes its place beside the Royal Architectural Institute of Canada, the Australian Institute of Architects, the Institute of South African Architects, and the New Zealand Institute of Architects, all of whom are working in federal union with the R.I.B.A. for the control and advancement of architecture throughout the Empire.

HOSPITAL APPLIANCES

At a meeting of the Liverpool Branch of the Incorporated Hospital Officers' Association, held at the Royal Infirmary, Liverpool, Mr. Ernest Griffiths, M.INST.MECH.E., described in considerable detail the various appliances necessary for the engineering equipment of a modern hospital, and illustrated his remarks with drawings of actual installations.

He described the original centralized forced circulation heating and hot water service system, utilizing exhaust steam from electric engines and pumps as the primary heating medium. This system, he said, had proved so efficient and economical in this country that it had been generally adopted, and was now practically the standard type of plant.

He pointed out that unfortunately in the past the engineering services—being the silent services—were not fully appreciated, and were usually overshadowed by the architectural requirements. Inappreciation of these services had resulted frequently in excessive annual running costs.

He concluded by pointing out the great financial advantage to be gained by a hospital generating its own electricity, and utilizing the exhaust steam from the engines for heating purposes. By this means a double use was obtained from the steam which would in any case have to be generated for the heating.

THE GOLDEN AGE OF GREECE

Sir Banister Fletcher, P.R.I.B.A., on Wednesday evening last, gave an instructive lecture at the Central School of Arts and Crafts on the Hellenic period of Greek architecture.

This period, the "golden age" of Greek art, he said, was rapidly developed by the Greeks from the rough work of the Mycenæan period, to the work of the Periclean period of the Acropolis at Athens, the Parthenon, with its world-famous sculptures, and other monuments.

Sir Banister first dealt with the varied physical and national influences which helped to mould the architecture. The sea had a unifying effect on the Greeks, who were a maritime nation, colonizing by commerce and not by conquest, and this international intercourse had an influence on Greek art. The religion of the Greeks necessitated the building of many temples, and these were the chief buildings remaining of their work. The fineness of line and smoothness of surface, which the clearness of the atmosphere demanded, were rendered possible by the beautiful marble of Mount Pentelicus. The civic spirit of the people led to great zeal in the planning and adorning of their towns.

The lecturer also gave an account of the architectural features of the style—the massive and finely jointed walls, the graceful columns, the planning of temples with external colonnades and small central "naos" or dwellings of the gods, the carefully designed mouldings, utilized with modifications in every age down to the present day, and the refined carving which adorned their works.

ANNOUNCEMENTS

Mr. Frank Scarlett, B.A., A.R.I.B.A., has opened an office at 43 Bedford Row, W.C.1. Telephone: Chancery 8006.

The London address of Mr. H. T. B. Barnard, A.R.I.B.A., is 60 Gower Street, W.C.1. Telephone: Museum 9951. His provincial address is No. 35 Earl Street, Maidstone. Telephone: 752.

Mr. John F. Matthew, who was the partner of the late Sir Robert Lorimer, will continue to carry on the practice under the same firm name of Lorimer and Matthew.



Brighthelmstone in 1770. From an engraving by Joseph Lambert.
[*From* Famous South Coast Pleasure Resorts.]

LITERATURE

SOUTH COAST RESORTS

From Pliny and Canute to the present-day Bank-holiday tripper, persons royal and otherwise have loved to spend leisure hours somewhere within glancing distance of a "sea view." The English Channel coast is blessed with a particularly benign climate and a number of advantages natural and acquired, and it is therefore not surprising that some 300 pages can be closely filled with matter concerning "*Famous South Coast Pleasure Resorts*, their historical associations, their rise to fame, and a forecast of their future development." What does strike one as a little surprising is that so large and full a volume, with an "imposing collection of over 200 illustrations . . . assembled by the author regardless of trouble and expense," should just fall short of creating and maintaining that interest which the title promises.

There is just too much and just too little in Mr. Harold Clunn's compilation. Too little "history"—a vague and generous word!—too little breadth in the consideration of "future development," and too much detail, particularly as to pounds, shillings, and pence, in the counting of the steps on the "rise to fame." Yet the history ranges through the centuries to the "grim horrors of war," ten o'clock closing, and the notorious crimes of a few years past; it includes the stories of controversies on mixed bathing, on Sunday bands, on tramways *versus* buses; it provides merry, if somewhat irrelevant anecdotes, such as the one about the author and an "Australian A.P.M. of all people," in a London theatre. It even notices Home Rule for Ireland. And if its trivialities may seem a trifle intrusive to those readers who are hoping to find something more substantial than the author evidently designed to present, whose fault is that? Not his, but theirs.

There is certainly something a little novel and somewhat diverting in a book published in 1929 and very much up to date which follows, consciously or unconsciously, the 1829 manner and even adopts nineteenth-century language. That is evidently the way to take Mr. Clunn's book. The series of chapters on the seven "resorts" and their satellites deal with their subject in a "Tour" or a "Stroll," sometimes a trifle too extensive perhaps for the normal present-day tourist if taken on foot in the best nineteenth-century manner, and excluding just those parts of a more rural hinterland which the voluntary pedestrian might prefer to seek. But

Brighton in 1823, viewed from the neighbourhood of the present railway station.



[*From* Famous South Coast Pleasure Resorts.]



The High Street, Hastings. [*From* Famous South Coast Pleasure Resorts.]

then Mr. Clunn is not offering country rambles, nor archæological expeditions. He sets no store by antiquity, nor do natural beauties untouched by man appear to appeal to him. Concerning a certain sadly surviving piece of meadow, he observes : " Meadow land is pleasant enough in its proper place, but here, in the centre of a smart pleasure resort, it is a distinct anomaly and an eyesore. It is earnestly to be hoped that the remaining stretch of this meadow land may be put to a more useful purpose in the near future . . . it gives a dowdy appearance. Such a fine piece of land overlooking the sea front would be an admirable site for the construction of an arcade, or a handsome row of high-class shops . . . not of the most approved Tooting or Edmonton pattern, but something after the style of those to be seen at Monte Carlo or Montreux." (One is tempted here to suspect that the author himself is one of those daring creatures, a " much-travelled Englishman . . . a globe-trotter " !) He describes with gusto an " Italian sunken garden which has been created out of a chalk quarry . . . and contains a handsome tea-house," and his comments on so enterprising an achievement let us into his confidence in the manner of his forerunners of a hundred and fifty years ago : " This affords a most illuminating example of what can be accomplished by the skill of man, in substituting the artificial order of things for the wild or cosmic state of Nature, as revealed by the bare slopes of Beachy Head." Elsewhere the secret sins of our politicians are darkly hinted at in the revelation that Lord Balfour " used to frequent Littlestone-on-Sea for the purpose of indulging in a game of golf." Among the numerous illustrations the modern photographs are the least convincing, and those from old prints are of considerable interest. It is of significance, too, that there should be some record of those dignified, if slightly pompous, squares, crescents, colonnades, and terraces which are being so rapidly demolished in those resorts whose " rise to fame " generally dates from their erection. Variety and modernity are, no doubt, essentials to present-day efficiency in these places, but much of our frenzied modern planning and building might benefit by a leisurely contemplation of the virtues of punctuated monotony, demonstrated by parts of the older Brighton, the older Hastings, the older Hove, even though many of our younger seaside resorts may deserve the title bestowed by Mr. Clunn upon Bexhill, " a budding Chicago." V. M. C.

Famous South Coast Pleasure Resorts. By Harold Clunn. T. Whittingham & Co. Price 7s. 6d. net.

A USEFUL BUILDING TRADES DIRECTORY

Kelly's Directory of the Building Trades, 1929, just issued, reaches its seventeenth edition. Like its predecessors, it comprises every trade and profession connected with architecture and building throughout England, Scotland, and Wales. It also includes a list, considerably revised, of proprietary articles and trade names : a list that makes the directory of still greater use.

Every year the directory seems to grow a little more bulkier, and in the present issue there are 3,021 pages, containing the names of craftsmen, etc., and 108 pages are devoted to the list of proprietary articles. Thus corpulency creeps on slowly, but instead of denoting discomfort or distress, it only makes the book healthier and more useful. The annotation is as near perfection as possible. In fact nothing has been neglected to make the production of the utmost value to everyone connected with architecture and building.

Kelly's Directory of the Building Trades, 1929. Kelly's Directories, Ltd. £2 10s. net.

PUNCH ALMANACK, 1930

If, in these days, it be possible to find oneself isolated for a spell from news of the world, to what periodical would one fly on return to rub up one's knowledge of it? Probably to *Punch* ; and certainly to none with more profit. Of this year's Almanack this is especially true. It is a concentrate of satirical criticism of modes and manners. Beneath Arthur Watts's cover, which reveals Mr. Punch himself in the act of performing a prodigious ski-jump, attended with inimitable aplomb by the faithful dog Toby, you may see Lewis Baumer exploring the possibilities of " The Alps in an Afternoon " (from London); Fougasse intrigued by the behaviour of white waistcoats; Wallis Mills aiming a (coloured) shaft or two at the Bright Young People; Ghilchik with a tip for the easy-chair designer, and also excited to colour by an incident in a dance club; L. Raven Hill revealing " What Scotland has to put up with," and much further pictorial comment upon our current foibles. Herein you may read an astonishing detective story by A. P. H.; Evoe's verses from a mythical family album, and " imitation of all the Nature-stories that ever were." The finest thing in it is Frank Reynolds's painting, reproduced across two pages in colour, " Christmas in Soho." Fougasse's " Street Signs," another colour page, has a moral for the architect—and, of course, there is the usual plumber-baited joke, this time by G. L. Stampa. F.

Punch Almanack, 1930. Bradbury, Agnew & Co., Ltd. Price 1s. net.



Cockington Village, Torquay. [*From* Famous South Coast Pleasure Resorts.]

THE SKYSCRAPER

MORALS OF THE ARCHITECTURE CLUB DISCUSSION

AT the dinner of the Architecture Club last week, skyscrapers rose and fell like packs of cards. The subject for discussion was American architecture of the present and future, and the fact that most speakers concerned themselves nearly entirely with skyscrapers proves that this peculiar efflorescence of modern American civilization has become the dominant problem of its architecture. How closely this problem presses the ingenuity and artistic integrity of American architects may be gathered rather from the remarks of Harvey Corbett, whose long-range prognostications are being continually eclipsed by oncoming fact, than from those of William Adams Delano, who represents a school of designers imperturbably traditional amid this vast mechanical upheaval.

Said Mr. Delano: "Don't copy us. . . . The skyscraper is too big, too clumsy and too soulless. Only from a distance, and in mist, is it bearable and beautiful. At close quarters it is a brute."

But Mr. Corbett, who likes skyscrapers, and has, in a sense, controlled skyscrapers through his vision of what the zoned skyscraper could be, never really believes that we *could* copy America, if we would. To him the skyscraper of today is but a temporary manifestation, proving that the thing is possible: a mere pointer to the future. He believes that man is infinitely capable of being herded in tubes, shot up in lifts, poured up and down escalators, lifted, dropped, and swept this way and that way to the tune of a machine which is his 100-story, his 200-story skyscraper of the future.

Mr. Corbett sits on top of a synthetic world, and thoroughly believes in it. Numbers excite him. Five thousand people up a moving stair—ten thousand—a hundred thousand—thousands pouring up and pouring down. He is the prophet of a new Egypt, eclipsing Rome. His architecture is sculptured mass, three-dimensional, solid geometry, with the cross-section of a Dutch cheese. Perhaps his Bush Building in London was the last building in which the features of an older tradition were to appear. Thereafter comparison may be stretched no farther, and he is to be bound by horizons no Roman ever saw.

And I believe he is right in the main: and that architecture in America is tending in the direction he points; and that if it could produce the "rational" skyscraper whose mechanic workings could be brought to beat in time with the common pulse of human life there would be room for the finest monument to modern America. But so far it cannot. The skyscraper is based upon a hundred anti-social factors. No regard for light and air directs its huddled congregation in the business zones of New York. Nothing better than chronic overcrowding produces the skyscraper, and it is a monument to nothing finer than the power of Wall Street to turn men into machines.

It was left to Thomas Adams, whose knowledge of New York is wider and more accurate than that of any other man, to set the skyscraper in its place, and to remind us of the rigid relationship of population to streets. London has narrow streets and fairly high buildings, and is overcrowded. New York has wide streets and very high buildings, and is still more overcrowded. Both are irrational, but the overcrowding of New York is chronic exactly where the buildings are too high; and they may be built higher only at the risk of worse overcrowding. That is all. And while they are badly lit and jumbled together the congestion spreads upwards; a congestion of buildings no less dangerous than that of crowds. To this the skyscraper may offer no solution that does not deprive it of half its present character.

Isolate it from the undergrowth of steel and stone among which it now stands. Would it not blossom and enfoliate its anatomy to receive the light, as a flower that is brought from a dark place unfolds its leaves and petals to the sun? Would it not become as little like the puny stalk-thing of Lower Broadway as the butterfly is unlike the slug? And is not the skyscraper *macrocosmos* to the mites that inhabit it, as dependent as they for the fullest expression of its life, upon the sun and the common air? Then is the skyscraper of New York a building diseased and under-nourished. It can never express more than a small part of a wide civilization. It will not become really great architecture.

E. MAXWELL FRY

CORRESPONDENCE

THE HONEYWOOD FILE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Karshish has given me the answer I desired on the point of tender and acceptance (see November 6 issue). I had been into this matter previously, and discovered that the *wording* of the tender is of importance—e.g. it must be a "Tender," and not an "Estimate." I really only wanted to "draw" the opinion of this writer of experience; worded my letter accordingly—and succeeded.

I realize that I did not make one point as clear as it required. Of the four tenders referred to, two were withdrawn a few days *after* acceptance, and were therefore binding contracts. One was withdrawn an hour after opening and *before official* acceptance, and the withdrawal in the fourth case crossed my acceptance in the post, and I imagine would not be considered a breach of contract. When I stated that I released unwilling contractors, I was endeavouring to be brief. I, of course, did so after consultation with the client.

I would, personally, be glad to see this series continued into the period of later difficulties; covering the cases of such minor worries as smoky chimneys and "leaky" windows, which often prove to be a result of condensation—and very particularly the reaction of all parties to the future misbehaviour of the super-paint.

A. J. M.

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—As the question of profit is a matter of general interest, I would like, with your permission, to make clear why it is rather arbitrary to say that "7½ per cent. is about right for profit." I cannot illustrate this better than by giving three actual cases.

A, a contractor, puts in a claim for 15 per cent. net profit and receives 12½ per cent.; B, another contractor, is willing to undertake contracts on time and materials on a basis of 12½ per cent. gross profit; C, a large contractor, is satisfied with a 2½ per cent. net profit on turnover. I acted for A, saw B's figures, which I can vouch for, and saw C's balance-sheet. A would consider 7½ per cent. net profit out of the question; B would regard it as a reasonable profit; and C would look upon it as a handsome profit. What would be right for B would certainly not suit A, but would be acceptable to C. But how are we to give this concrete form? Would it not be arbitrary to say that A and C must conform to the practice of B? I suggest that it is a matter for A and C, whom it concerns.

Again, in deciding the amount of profit, the character of the work should be taken into consideration. This is rather a ticklish affair. In some instances 7½ per cent. net profit might be considered inadequate; in others, reasonable; whilst there are cases where it might be regarded as excessive. Karshish does the quantity surveying profession an injustice in the

reply of Tinge, for I venture to suggest that no quantity surveyor of repute would decide on such flimsy evidence. Besides, Spinlove, had he understood the rudiments of practice, would have known that a claim must be met in one of two ways: by irrefutable facts (evidence), or settled by a compromise. What is the value of Tinge's evidence? How did he know whether Nibnose and Rasper's claim for 7½ per cent. profit was right or wrong without examining their evidence?

Potch, I note, is again wrong in his calculations, for 10 ft. 11 ins. by 12 ft. 2 ins. is nearer 133 ft. supl. than 132 ft. supl. With all due respect to Karshish, I suggest that Spinlove would have acted wiser had he consulted his quantity surveyor in this matter instead of referring it to Grigblay for Bloggs to check. Bloggs confirms Potch, and I deduce that neither have taken into consideration the area of the recess in calculating the area of the floors.

In conclusion, I would like to add my appreciation of Karshish's excellent narrative; I have, in reading the articles, enjoyed many pleasant half-hours.

T. SUMNER SMITH

THE BUILDINGS ILLUSTRATED

Following is a list of the specialists, contractors and some of the sub-contractors for the buildings illustrated in this issue:—

Seventh Church of Christ, Scientist (pages 790-794). Quantity surveyor, W. Gordon Allen. Consulting engineer, Dr. Oscar Faber. Adviser on electrical work, Laurence M. Tye. General contractor, E. H. Burgess. Sub-contractors: Thos. Laurence and Sons, bricks; Bath and Portland Stone Firms, Ltd., stone; Redpath, Brown & Co., Ltd., structural steel; Roberts, Adlard & Co., slates; R. W. Brooke & Co., Ltd., wood-block flooring; Art Pavements and Decorations, Ltd., "Biancola" flooring; Benham and Sons, Ltd., ventilation and central heating; L. G. Hawkins & Co., Ltd., and Troughton and Young, electric light fixtures; John Bolding and Sons, Ltd., sanitary fittings; James Gibbons, Ltd., door furniture; Williams, Gamon & Co. (Kaleyards), Ltd., casements; Plastering, Ltd., plaster; Garton and Thorne, Ltd., metalwork; J. and P. White and Sons, Ltd., pews, organ-case and joinery; Marryat and Scott, Ltd., lift; Haywards, Ltd., pavement lights and fire-resisting glazing; John Daymond and Son, Ltd., oak carving in the auditorium.

Arkwright House, Manchester (pages 795-799). General contractors, Robt. Carlyle & Co., Ltd. Sub-contractors: Limmer and Trinidad Lake Asphalt Co., asphalt; Trussed Concrete Steel Co., Ltd., Reinforced Concrete Engineers, reinforced concrete floors and patent flooring; J. C. Edwards, bricks; Banister, Walton & Co., Ltd., structural steel; Baxendale & Co., Ltd., glass; A. M. Macdougall and Son, wood-block flooring; Saunders and Taylor, Ltd., central heating; S. H. Heywood & Co., Ltd., electric wiring; Ediswan, electric light fixtures; J. Jaffrey & Co., plumbing; Shanks & Co., Ltd., sanitary fittings; H. F. Ramsay & Co., door furniture; Marley Bros., locks; Crittall Manufacturing Co., Ltd., casements and window furniture; J. and H. Patteson, marble; Wm. Arbuckle and Sons, and E. and A. Heighway, Ltd., furniture; Wm. Wadsworth & Co., lifts; Magneta Time Co., Ltd., clocks; Maclean & Co., pavement lights; Walter Macfarlane & Co., cast-iron breasts; Geo. Wragge, Ltd., balustrading, lamps, name-plates, etc.; British Vacuum Cleaner and Eng. Co., vacuum plant; Simpson Bros., terrazzo treads.

Fleming's Factory (pages 810-811). General contractors, Allen Fairhead and Sons, Ltd., who were also responsible for the foundations, reinforced concrete, artificial stone, glass, woodblock flooring, plumbing, plaster and joinery. Sub-contractors: Ragusa Asphalte Paving Co., Ltd., dampcourses, asphalt and special roofings; London Brick Co. and Forders Ltd., bricks; Power's and Deane Ransome's, Ltd., structural steel; Pennycook Patent Glazing and Engineering Co., Ltd., patent glazing; James Gray (1925), Ltd., central heating; J. and R. Fleming, Ltd., electric wiring, electric light fixtures and partitions; Leeds Fireclay Co., Ltd., sanitary fittings; Lockerbie and Wilkinson, Ltd., door furniture; Crittall Manufacturing Co., Ltd., casements; F. A. Norris & Co., iron staircases; Marryat and Scott, Ltd., lifts.

FOR EX-SERVICE MEN

The Rt. Hon. Sir Frederick Milner, in an appeal to the public on behalf of disabled ex-servicemen, states that money is needed to erect cottages for the married men and their families in the colony which is being formed. Money is also required to give treatment to a larger number of men in the new Home which is being acquired, and money is needed to give temporary help to the thousands who enter the Ex-Services Welfare Society's consulting rooms and who, although they do not respond to medical treatment, nevertheless need great help. He points out that there are 6,000 men in mental hospitals and 32,000 suffering from neurasthenia. The address of the Society is 51-53 Victoria Street, S.W.1.

The Architectural Press draws attention to the fact that they have for disposal, at greatly reduced prices, a quantity of slightly soiled copies of Architectural Works, particulars of which are given in the advertisement in this issue.

COMPETITION CALENDAR

December 7. The Provost, Magistrates, and Councillors of Dumfries invite architects practising in Great Britain to submit competitive designs for the Town Hall and Municipal Offices, which it is proposed to erect on the site of the old Town Hall and of the Municipal Offices. Dumfries. Assessor: Sir George Washington Browne, P.R.S.A. Premiums: £300, £200, and £100. Application for conditions of competition, etc., should be made to R. A. Grierson, Town Clerk, Town Hall, Dumfries. Deposit £2 2s. Latest date for sending in designs: December 7.

January 1. The Aberystwyth Town Council invite architects to submit competitive designs for the erection of a Municipal Pavilion with Refreshment Rooms and other conveniences on the site of the old Waterloo Hotel, at the corner of the Marine Parade and Terrace Road, extending to Bath Street. Assessor: Arnold Thornely, F.R.I.B.A. Premiums: £100, £70, and £30. Application for conditions of competition, etc., should be made to T. J. Samuel, Town Clerk, Town Hall, Aberystwyth. Deposit, £2 2s. All designs must be sent to the Borough Surveyor, Corporation Offices, Smithfield Road, Aberystwyth, not later than January 1, 1930.

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All enquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W. 1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.

LATEST PATENT APPLICATIONS

32906. Banks, R. F. Production of cold glazing on building materials, etc. October 30.

32811. Burke, A. Building bricks. October 29.

33087. Dahren, J. A. Supporting-piles for buildings. October 31.

33351. Frewen, E. J. Building construction. November 2.

32756. Pater, W. Device for passing cables through roofs of buildings. October 28.

SPECIFICATIONS PUBLISHED

321013. Baker, T. G. Building construction.

321055. Trumpy, E. Construction of floors and ceilings.

ABSTRACT PUBLISHED

318864. Subaqueous structures. Herrera, F. G.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The COULSDON U.D.C. is to undertake a sewerage scheme for Upper Sanderstead, at a cost of £16,200.

The L.C.C. Education Committee is to reconstruct Wilmot Street elementary school, BETHNAL GREEN, at an estimated cost of £21,688.

The BRENTFORD and CHISWICK Education Committee is to erect a new elementary school for about 360 pupils, fronting Lionel Road.

The L.C.C. Education Committee is to remodel the Beethoven Street elementary school, PADDINGTON, at a cost of £6,500.

The Barking U.D.C. has purchased a site on the BECONTREE estate, upon which to erect an elementary school.

Messrs. W. R. Hindmarsh & Co. are to lay out two streets on a building estate at Foots Cray Road, ELTHAM.

The L.C.C. Education Committee is to purchase a site for an elementary school at Cooper's Lane, LEWISHAM.

The L.C.C. Education Committee has under consideration schemes for the provision of schools for defective children on the Bellingham and Downing housing estates at LEWISHAM.

The BARKING U.D.C. has prepared schemes for the construction of open-air swimming baths in Longbridge Park at a cost of £9,000, and the extension of the boating lake at a cost of £6,000.

The EAST HAM Corporation has prepared schemes for improvements at parks and recreation grounds, including the erection of pavilions, at a total cost of £7,000.

The L.C.C. has agreed to proceed with the scheme for widening PUTNEY BRIDGE, the Ministry of Transport having promised a grant of 60 per cent. of the cost.

Plans passed by the WOODFORD U.D.C. :—Two houses, Greenstead Avenue; six houses, Broadmead Road; seven shops, Maybank and Primrose Roads; six houses, Primrose and Maybank Roads.

Plans passed by the LEWISHAM B.C. :—Lay-out of silk mills, for Mr. A. Houghton; buildings, Nightingale Grove, for Messrs. Hood Bros.; ten houses, Baring Road, for Messrs. W. J. Scudamore, Ltd.; ten houses, Longton Avenue, for Messrs. Higgins Bros.; premises in Malyons Road, for Messrs. John Harrison & Co.

Plans passed at SANDERSTEAD : Fourteen houses, Farleigh Road, for Messrs. Church and Grey; house, West Hill, for Mr. W. Ernest; thirty houses, Norman, Derrick and Gordon Avenues, for Mr. J. P. Warren; store, 12 and 12A Station Parade, for Barclays Bank, Ltd.; bungalow, Kingswood Lane, for Miss Outram.

Plans passed by the COULSDON U.D.C. : House, Marlpit Lane, for Mr. H. C. Doddrell; house, Fairdene Road, for Messrs. Walter Cottage, Ltd.; shop, Chipstead Valley Road, for Messrs. Watney, Combe, Reid & Co.; nine houses, The Vale, for Messrs. Thomas and Son; four houses, Marlpit Lane, for Messrs. Barnet and Copeland; eighteen houses, The Vale, for Messrs. Thomas and Son; house, Lacy Green, for Mr. H. C. H. Graves; streets and sewers, continuation of Coulsdon Rise, Stonyfield Road, and Harts Way, for Mr. C. H. Cearn.

Plans passed at PURLEY : Two houses, Riddlesdown Avenue, for Mr. G. Peskett; bungalow, Old Lodge Lane, for Mr. H. L. Harrison; two houses, Grovelands Road, for Messrs. R. D. Taylor, Ltd.; house, Hartley Old Road, for Mr. F. A. Freeman; house, Mitchley Avenue, for Mitchley Wood Estate Co.; house, Hartley Down, for Mr. G. T. Fox; house, Selcroft Road, for Mr. S. C. Kirby; sixty houses, Hadyn Avenue, for Old Lodge Estates, Ltd.; house, Copse Hill, for Mr. J. G. Cooper; house, Brancaster Lane, for Mr. W. J. Frewing; house, Hartley Old Road, for Mr. S. J. Garten.

SOUTHERN COUNTIES

The BOURNEMOUTH Corporation has decided to seek sanction to borrow £65,000 for the extension of the Boscombe promenade.

The GUILDFORD Corporation has approved a lay-out plan for the erection of forty-four houses on the Westborough Estate.

The GRAVESEND Corporation Housing Committee is considering a reconstruction scheme for the West Street area.

The GRAVESEND Corporation is inquiring as to the purchase of another estate for a housing scheme.

The KENT Education Committee has purchased a site at Orpington for the erection of a central school.

The DARTFORD U.D.C. has purchased land at Heath Lane for a housing scheme, and is negotiating for a site in Howard Road for a re-housing scheme.

The GRAVESEND Corporation Housing Committee has instructed the borough architect to prepare a scheme for the erection of further houses on the King's Farm estate.

The GUILDFORD Corporation is negotiating with the Trinity Hospital governors, for an area of land adjoining Stoughton Recreation Ground and Shepherds Hill Housing Estate, for housing purposes.

Plans passed by the DARTFORD U.D.C. :—Alterations and additions, Watling Street Stores, for Mr. H. Gooding; house, Swaisland Road, for Mr. W. J. Flagg; two houses, The Brent, for Mr. W. F. Summers; bungalow, Pilgrims Way, for Mr. Brakefield; two houses, St. Vincents Road, for Mr. W. R. Mackney; bungalow, Summerhouse Drive, for Mr. W. Cawthorne.

Plans passed by the BOURNEMOUTH Corporation : Additions, Lowther Road, for Messrs. Wallace Jones and Sons; additions, Bournemouth Steam Laundry, Littledown Road, for the Bournemouth Steam Laundry Co.; additions, Courtlands Hotel, Spa Road, for Mr. W. H. Letley; additions, 609 and 613 Christchurch Road, for Messrs. F. W. Woolworth; additions, Labour Hall, Lincoln Avenue, for the trustees; shops, offices and flats, Westover Road, for Mr. W. Hayward; forty-four houses, Seafield Road, for Mr. S. Kermode; two houses, Elgin Road, for Messrs. G. E. and W. R. J. Lambert; eight houses, Priory View Road, for Mr. W. W. Baker; three houses, Naseby Road, for Mrs. Richards; club, garage and flats, Stourwood Avenue, for Messrs. H. Whiting and Sons; two houses, The Grove, for Mr. H. Watton; four houses, Charminster Road, for Mr. F. J. Marks; two houses, Cranmer Road, for Mr. J. Kay; two houses, Cellars Farm Road, for Mr. W. J. Clarke; three houses, Wimborne Road, for Mr. A. Templeman; three houses, Brackenhurst Road, for Mr. S. G. Ward; shops, Curzon Road, for Mr. C. Miller; four houses, Award Road, for Mr. H. Threfall; alterations, rear of Waverley Road, for the British and Foreign Light Controlling Co.

SOUTH-WESTERN COUNTIES

Plans passed by the DORCHESTER Corporation :—House, Louise Road, for Mr. H. F. G. Weller; alterations, 1 South Terrace, for Mr. F. G. Pope; balcony, Trinity Street, for Messrs. Genge & Co., Ltd.; alterations and additions, Dorchester Brewery, for Messrs. Eldridge, Pope & Co., Ltd.; alterations and improvements, 52 South Street, for Mr. E. G. Clark.

The TORQUAY Corporation Baths Committee has now approved the completed plans of the proposed new swimming bath at Upton.

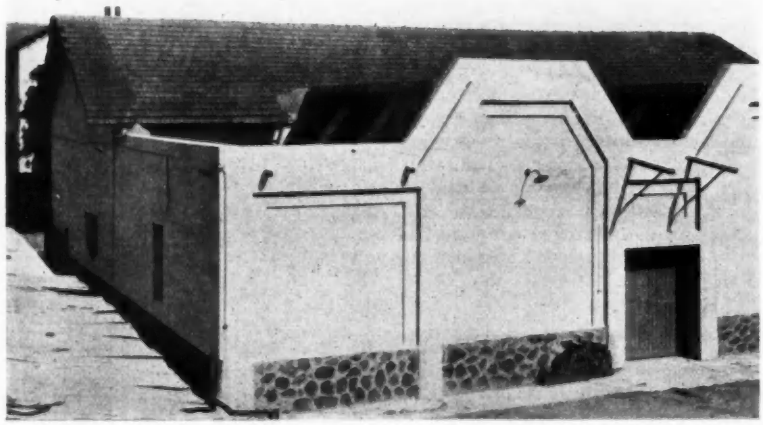
Plans passed by the PAIGNTON U.D.C. :—House, Laura Grove, for Mr. A. E. Knight; six bungalows Totnes Road, Collaton, for Mr. J. Maunder; alterations and additions, Addison Café, Torbay Road, for Addison Café Co., Ltd.; alterations and additions, Gerston Hotel, for Mr. J. S. Huggins; house, Barcombe Heights, for Mr. H. Proctor; house, Elm Park, for Messrs. Maunder and Sons; alterations, Oldway House, Torquay Road, for Paignton and District Land and Development Co. Ltd.

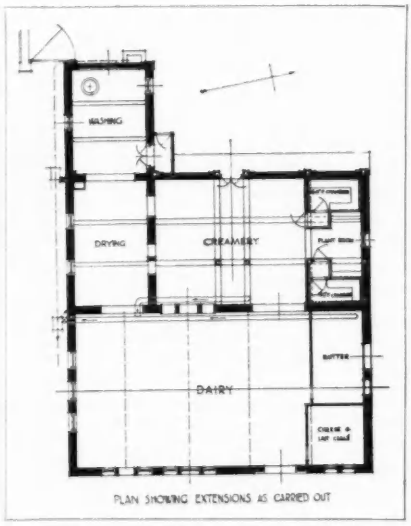
EASTERN COUNTIES

The LOWESTOFT Corporation Education Committee is to erect a new school for girls in Church Road.

The LOWESTOFT Education Committee has decided to erect a new central school to accommodate 450 children, on the site in St. Peter's Street.

Plans passed by the LOWESTOFT Corporation : Two houses, Colville Road, Oulton Broad, for Mr. A. E. Ingles; house, Chestnut Avenue, for Mr. S. F. Godbold; house, Yarmouth Road, for Mrs. A. J. Leslie; cottage, Victoria Road, for Mrs. Elliott.





Extension to Dairy, Koubbeh Gardens, Cairo, Egypt. Designed by W. W. Wood. The exterior; and the plan, showing extensions as carried out. In providing for future extensions it was necessary to support the roof independently of the walls, a reinforced concrete framework was therefore employed. The new north and west walls, the only sides on which extensions are possible, are of brick.

MIDLAND COUNTIES

The NORTHAMPTON Education Committee has purchased a site on the Bective Estate, for the erection of an elementary school.

The Warwickshire Education Committee is to erect two elementary schools, one for 400 pupils, and another for 600 pupils, at RUGBY.

The WARWICKSHIRE Education Committee has agreed to loan £11,500 to the governors of King Edward VI. Grammar School, Stratford-on-Avon for the erection of new buildings.

The Board of Education has passed the preliminary plans of the Warwickshire Education Committee, for the erection of the secondary school for girls at SOLIHULL.

The WARWICKSHIRE C.C. is to convert Leigh House into a nurses' home at an estimated cost of £13,300, in accordance with plans prepared by the county architect.

The WARWICKSHIRE Education Committee has decided to erect an elementary school at Kenilworth for 300 children, and is also to proceed with the erection of an elementary school for 500 children at Bedworth.

Plans passed by the SEDGLEY U.D.C.:—Bungalow, Wolverhampton Road, for Mr. Norman Price; house, Gorge Road, for Mr. Turner; house, Greenleighs, for Mr. H. J. Lathe; house, Turls Hill Road, for Mr. W. Horton; house, Goldthorn Park Estate, for Mr. G. E. Williams.

The Board of Education has sanctioned the proposal of the Warwickshire Education Committee for the purchase of a site at STRATFORD-ON-AVON for the erection of a secondary school for girls.

Plans passed by the NORTHAMPTON Corporation: Shop and store, St. Andrew's Road, for Mr. A. Clarke; house, Spinney Hill, for Mr. James Collier; house, Park Way, Weston Favell, for Mr. A. F. Wells; four houses, The Drive, for Messrs. Walker and Perrett; two houses, Kettering Road, for Mr. C. H. Rainbow; house, Christ Church Road, for Messrs. E. H. Tibbs & Co., Ltd.; alterations and additions, 110 Abington Street, for Messrs. Turner & Co.; alterations and additions, 50 Abington Street, for Messrs. Slades; extensions to saw mills, Palmerston Road, for Messrs. E. Green and Son; extensions to warehouse, rear of 122 Admitt Road, for Messrs. Freeman and Sons; class rooms, etc., Lower Hester Street, for the trustees of Hester Street Mission Hall; two houses, Brookland Road, for Messrs. S. G. Sale & Co.

NORTHERN COUNTIES

The HULL Corporation is to consider the purchase of additional land for housing.

The CONSETT U.D.C. has decided to erect another fifty houses of small type.

The BILLINGHAM U.D.C. is to erect new council offices at a cost of £14,250.

The HULL Education Committee has obtained sanction for a loan of £15,765, for the erection of an elementary school at Eastfield Road.

The DARLINGTON Education Committee is to erect an elementary school for 880 pupils at Henderson Street.

The DURHAM County Education Committee is to remodel the council schools at Benfieldside, at a cost of £11,000.

The BIRKENHEAD Corporation Baths Committee recommends the council to proceed with the proposed South End public baths, at an estimated cost of £45,950.

The BIRKENHEAD Corporation is seeking a loan of £9,000 for the erection of tenements on the old county court site, Knox Street.

The BIRKENHEAD Education Committee has obtained a site at Sand Field, Woodchurch, for the erection of an open-air school.

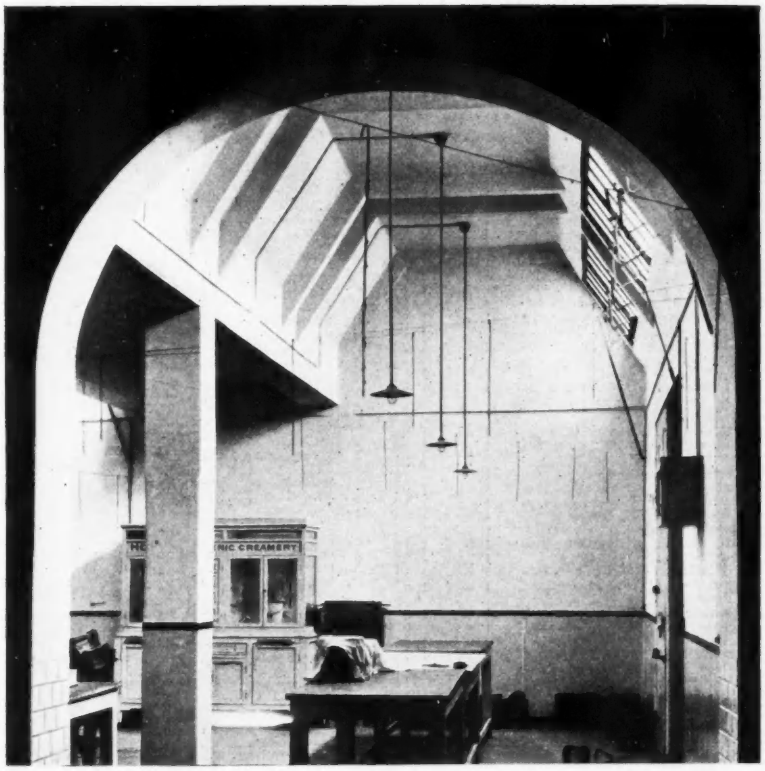
The BIRKENHEAD Education Committee has selected a site in Tollemache Road for the erection of a central school.

Messrs. Fox and Lee have acquired land in Listerhills Road and Manchester Road, BRADFORD, for the erection of workshops and garages.

The BOLTON Corporation has obtained sanction for a loan of £23,718 for the erection of fifty-eight houses on the Cameron Street site.

Mr. Hector Jewels has purchased six sites at Links Road from the TYNEMOUTH Corporation for the erection of houses.

The RIPON city engineer has prepared plans for a new road from Southgate to Bondgate, and the lay-out of shop sites.



Extensions to Dairy, Koubbeh Gardens, Cairo, Egypt. Designed by W. W. Wood. The new creamery. The floor is finished in mosaic on concrete, with black mosaic coves. The dado is in cement, finished in white enamel. Polished marble has been used for the black band at the top of the dado.

The BOLTON Co-operative Society, Ltd., is acquiring a site on the Hall Estate for the erection of branch stores.

The Board of Education has approved the plans of the HULL city architect for the erection of an elementary school in Maybury Road.

The MANCHESTER Corporation has obtained sanction to borrow £11,000 for extensions at the central library at Moss Side and at the Gorton wash-houses.

The MANCHESTER Education Committee is to proceed with the erection of Barlow Hall School for 750 children at a cost of £26,728, and Briscoe Lane School at a cost of £18,870.

Sanction has been obtained by the HULL Corporation to borrow £14,700 for a rehousing scheme rendered necessary by the construction of the new road from Paragon station.

The HULL Corporation has asked the town clerk, medical officer of health, city architect and city treasurer to prepare a scheme for dealing with the whole of the slum areas and unhealthy dwellings within the city, during a period of ten years.

The DURHAM County Education Committee has arranged for the new council school at Lumley to be erected under the supervision of the Education Architect. The estimated cost is £6,172. Work is to be carried out by direct labour.

The NEWCASTLE Corporation has received a letter from the divisional road engineer of the Ministry of Transport, stating that he has forwarded a recommendation for financial assistance towards the reconstruction of Scotswood bridge, at an estimated cost of £32,400.

The SHIPLEY U.D.C. has prepared schemes for the new 15-in. high trunk water main from Graincliffe reservoir to the Rosse Hotel, at an approximate estimated cost of £23,500, and a new low level trunk water main at an approximate estimated cost of £6,500.

The SOUTH SHIELDS Corporation is to negotiate with the London and North Eastern Railway Company for the carrying out of the Wenlock Road bridge scheme at an estimated cost of £10,500, and for the widening of the Dean Road bridge at an estimated cost of £15,000.

The Tees Conservancy Commissioners, Messrs. Dorman, Long & Co., and the London and North Eastern Railway Co., have now provisionally approved the details of the scheme for the construction of a bridge over the River Tees at NEWPORT. The Minister of Transport has intimated that he is prepared to make a grant of 75 per cent. towards the approved cost.

Plans passed by the BIRKENHEAD Corporation: Addition, "High Bank," Mount Pleasant; two houses, Mather Road; house, Bidston Road; extensions to glue works, New Chester Road; alterations and additions, 27 and 29 Grange Road West; alterations, Empire Picture House, Conway Street; two houses, Village Road; two houses, Devonshire Road.

The HULL Education Committee has decided to proceed with the following schemes: Eastfield Road senior boys' department, 480 pupils; Parkfield Drive combined infants' and junior mixed department, 400 pupils; Parkfield Drive senior girls' department, 480; Willerby Road combined infants' and junior mixed department, 400; Willerby Road senior mixed department, 480; Pickering Road school combined infants' and junior mixed department, 400; Pickering Road school senior mixed, 480; Hall Road school junior department, 400; Hall Road school mixed, 480; Endyke Lanes school, 400; Bricknell Avenue combined infants' and junior mixed, 400 pupils, and grammar school, 400.

SCOTLAND

Plans passed by the GLASGOW Corporation: Seventeen bungalows, Sikenhead Road and Menock Road, for Messrs. Mactaggart and Mickel, Ltd.; picture house, Ardmay Crescent, King's Park, for Mr. Robert F. M'Math; terraced houses in Victoria Drive, Northland Drive and Danes Drive, Scotstoun, for Messrs. W. and G. Taylor.

The GLASGOW Corporation Housing Committee has prepared the lay-out plans of the Knightswood housing area, so as to permit of the erection of a block of shops on the south side of Alderman Road, Knightswood, and the utilization of a site at the corner of Killoch Drive and Dunterlie Avenue, for the erection of a church.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury..	S. Counties	1 4	1 0
B_2	BANBURY..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_1	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich ..	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teesside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 10 0
Pit gravel, per yd.	0 15 0
Pit sand, per yd.	0 12 6
Washed sand, per yd.	0 13 0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2 8 0
Lias lime, per ton	2 0 0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.

Transport hire per day:

Cart and horse	£1	3 0	*Trailer*	£0	15 0
3-ton motor lorry	3	15 0	*Steam roller*	4	5 0
Steam lorry, 5-ton	4	0 0	*Water cart*	1	5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0 1 6
SPREAD and level, including wheeling, per yd.	0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0 10 6
TRIMMING earth to slopes, per yd. sup.	0 0 6
HACKING up old grano. or similar paving, per yd. sup.	0 1 3
PLANKING to excavations, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.	
IF left in, add to above prices, per ft. cube	0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0 2 1
DO. 6 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube	2 3 0
DO. 6-2-1, per yd. cube	1 18 0
DO. in upper floors, add 15 per cent.	
DO. in reinforced-concrete work, add 20 per cent.	
DO. in underpinning, add 60 per cent.	
LIAS-LIME CONCRETE, per yd. cube	£1 16 0
BREEZE CONCRETE, per yd. cube	1 7 0
DO. in lintels, etc., per ft. cube	0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0 3 9
FINE concrete benching to bottom of manholes, per ft. cube	0 3 0
FINISHING surface of concrete spade face, per yd. sup.	0 0 9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in.

per ft.	£0 0 10
DO. *6 in., per ft.*	0 1 3
DO. *9 in., per ft.*	0 2 3

Cast-iron pipes, coated, 9 ft. lengths,

4 in., per yd.	0 5 6
DO. *6 in., per yd.*	0 8 0
Portland cement and sand, see "Excavator" above.	
Leadwool, per cwt.	£2 0 0
Gaskin, per lb.	0 0 4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0 8 3
DO. 6 in., per ft.	0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4 5 6
Flettons, per M.	2 12 6
White facing bricks, per M.	5 0 0
Multi-coloured facings, per M.	7 7 9
Best red facings, per M.	7 7 9
Rubbers, 9½ in., per M.	12 0 6
Staffordshire blue, per M.	9 5 0
Firebricks, 2½ in., per M.	9 5 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. *headers, per M.*	20 10 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0

Cement and sand, see "Excavator" above.

Lime, grey stone, per ton	£2 11 6
Mixed lime mortar, per yd.	1 6 0
Dampcourse, in rolls of 4½ in., per roll	0 2 6
DO. *9 in. per roll*	0 4 9
DO. *14 in. per roll*	0 7 6
DO. *18 in. per roll*	0 9 6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32 0 0
DO. in cement do., per rod	34 10 0
DO. in stocks, add 25 per cent. per rod.	
DO. in blues, add 100 per cent. per rod.	
DO. circular on plan, add 12½ per cent. per rod.	
DO. in backing to masonry, add 12½ per cent. per rod.	
DO. in raising on old walls, etc., add 12½ per cent. per rod.	
DO. in underpinning, add 20 per cent. per rod.	
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0 1 0
BEDDING plates in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING do. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
DO. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
DO. picked stocks, per ft. sup. extra	0 0 7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side, per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in., per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around gullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:

Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 9
Bath stone, per ft. cube	0 3 0

Usual trade extras for large blocks.

York paving, av. 2½ in., per yd. super.	0 11 0
York templates sawn, per ft. cube	0 7 6
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6

Cement and sand, see "Excavator," etc., above.

HOISTING and setting stone, per ft. cube £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup.	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do., per ft. run	0 1 4
HALF SAWING, per ft. sup.	0 1 0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	£0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 7 6
YORK SILLS, W. & T., ft. cub. fixed	1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0 1 3
DO. 2½ in. thick, per ft. sup.	0 1 6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies	£14 0 0
Countess	23 0 0
Duchess	32 10 0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8 3 9
Grey-green do., per ton	7 3 9
Green peggies, 12 in. to 8 in. long, per ton	5 13 9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0 0 6
Clips, copper, per lb.	0 2 0
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 2 2

Cement and sand, see "Excavator," etc., above.

Hand-made tiles, per M	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
DO. *Peggies, per ton*	7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	*Med. Green*
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6 7 0	
Grey-green do.	5 9 0	
Green peggies, 12 in. to 8 in. long	4 13 6	

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3 17 6
DO., machine-made do., per square	3 7 6
Vertical Tiling, including pointing, add 18s. 0d. per square.	
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22 0 0
11 × 4, per std.	30 0 0

Memel or Equal. Slightly less than foregoing.

Flooring, P.E., 1 in., per sq.	£1 4 6
DO. *T. and G., 1 in., per sq.*	1 4 6
Planed boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 1 6
Mahogany, Honduras, per ft. sup. of 1 in.	0 1 4
DO. *Cuba, per ft. sup. of 1 in.*	0 2 6
DO., *African, per ft. sup.*	0 1 3
Teak, per ft. sup. of 1 in.	0 1 2
DO., *ft. cube*	0 14 0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 4 6
DO. framed in floors, roofs, etc., per ft. cube	0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube	0 8 6
PITCH PINE, add 33⅓ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO., 3-ply, per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0 0 4½
DO. 9 in. wide and over per ft. sup.	0 1 2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in. per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅞ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

S nall sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1s. 6d. to 2s. per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	17	0
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	3
Liquid driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	13	0
DO., *flat, per gall.*	0	16	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/32 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, NOVEMBER 27

R.I.B.A., 9 Conduit Street, S.W.1. Exhibition of pen, pencil and colour drawings of the late Bertram Grosvenor Goodhue. Open until November 30. 10 a.m. until 8 p.m. (Saturdays, 5 p.m.). **10 a.m.**

CITY ART GALLERY, MANCHESTER. Exhibition of photographs of modern commercial architecture. Until December 31.

WESTMINSTER CITY SCHOOL, Palace Street, S.W.1. "By Car From Nile to Niger and Across the Sahara." By Owen Tweedy. **5.30 p.m.**

C.P.R.E., 17 Great Marlborough Street, Regent Street, W.1. Informal dinner to be held at Burlington Hotel, Cork Street, W.1. Subject of discussion: "National Parks." **7.30 p.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Art and House Collection. Open free. 10 a.m. to 4 p.m. **10 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Mogul Art." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "Greek Architecture (3000–146 B.C.)." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

THURSDAY, NOVEMBER 28

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee.

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Yates Archæological Lectures. Sixth of a course of eight Public Lectures. "Eleusis." By Dr. Ernest A. Gardner. **5 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Painters of the Norwich School." By S. C. Kaines Smith, M.B.E., 5.30–6.30 p.m. "Italian Renaissance Furniture." By L. O. Faraker. 3 p.m. **3 p.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Art and House Collection. Open free. 10 a.m. to 4 p.m. **10 a.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "The Dining Table." By R. Edwards. **7.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "The Foundation of New Thames-side Warehouse." By T. F. Burns. **6.30 p.m.**

FRIDAY, NOVEMBER 29

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By L. O. Faraker. "Georgian Furniture." By T. F. Wilson, F.R.S.A.I. Both lectures at 12 noon. **12 noon**

TATE GALLERY, Millbank, S.W.1. "French Painting." By Edwin Fagg, F.R.S.L. Between 11 a.m. and 12 noon. **11 a.m.**

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS. At the Clothworkers' Hall, Mincing Lane, E.C. Annual Dinner. **7 p.m.**

SATURDAY, NOVEMBER 30

Sunrise, 7.44 a.m. Sunset, 3.53 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Seventeenth-Century Furniture." 12 noon. "French Renaissance Furniture." 3 p.m. Both lectures by L. O. Faraker. "Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon**

L.C.C. SCHOOL OF BUILDING, Ferndale Road, Brixton, S.W.4. Last day for entry for Royal Sanitary Institute examinations.

MONDAY, DECEMBER 2

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." By L. O. Faraker. **12 noon**

WEDNESDAY, DECEMBER 4

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Some Architectural Poisons Abroad." By A. Trystan Edwards.

INSTITUTION OF STRUCTURAL ENGINEERS. Lancashire and Cheshire Branch. At the College of Technology, Manchester. Third Ordinary Meeting. Discussion on (i) "Reinforced Concrete Joints and Connections," to be opened by G. P. Bridges, A.M.INST.C.E. (ii) "Welding as a Method of Jointing Structures," to be opened by P. L. Roberts, A.M.C.T., M.I.WELD.E. **7 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Advertiser and the Disfigurement of Town and Countryside: Criticisms and Suggestions." By H. H. Peach. Sir Lawrence Weaver, K.B.E., will preside. **8 p.m.**

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Modern Design and Decoration." By Howard Robertson, F.R.I.B.A., S.A.D.G. (Lantern illustrations.) **7 p.m.**

THURSDAY, DECEMBER 5

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Some Notes on Modern Steel-frame Construction." By W. C. Cocking. **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Lettering." By Eric Gill. **5.30—6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Sir Christopher Wren and his Influence on the Craftsmen of his Time." By Percy Lovell. **7.30 p.m.**

UNIVERSITY OF LONDON, University College. "Shelley and Italy." A Public Lecture, by Prof. Edmund G. Gardner, F.B.A. **5.30 p.m.**

SATURDAY, DECEMBER 7

Sunrise, 7.53 a.m. Sunset, 3.50 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." 12 noon. "English Seventeenth-Century Furniture." 3 p.m. Both lectures by L. O. Faraker. "Indian Section: Sculpture." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon**

MONDAY, DECEMBER 9

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Eighteenth-Century Furniture." 12 noon. "Italian Renaissance Furniture." 3 p.m. Both lectures by L. O. Faraker. **12 noon**

TUESDAY, DECEMBER 10

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "The Nature and Effects of Glare." By W. S. Stiles (National Physical Laboratory). **7 p.m.**

WEDNESDAY, DECEMBER 11

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Overheads and other Factors Influencing Road Transport Costs, from an Engineer's Viewpoint." By Major Charles Wheeler, O.B.E., M.I.A.E. John Maughling will preside. **8 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, DECEMBER 12

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Veneering, Past and Present." By C. A. Hindley. **7.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Mediæval Brasses." By Muriel Clayton. **5.30—6.30 p.m.**

FRIDAY, DECEMBER 13

INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Informal Meeting. Discussion on "Welded Steel Structures," to be opened by A. Lakeman, L.R.I.B.A. **7 p.m.**

SATURDAY, DECEMBER 14

Sunrise, 8.1 a.m. Sunset, 3.49 p.m.

WEDNESDAY, DECEMBER 18

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Architectural Rendering." By E. M. K. Ellerton, A.R.I.B.A.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture (1)." By L. O. Faraker. "Indian Section: Cave Paintings." By T. F. Wilson, F.R.S.A.I. Both lectures at 3 p.m. **3 p.m.**

FRIDAY, DECEMBER 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture (2)." By L. O. Faraker. "Chippendale." By T. F. Wilson, F.R.S.A.I. Both lectures at 12 noon. **12 noon**

SATURDAY, DECEMBER 21

Sunrise, 8.6 a.m. Sunset, 3.50 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Mogul Design." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, DECEMBER 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. 12 noon. General Tour. By T. F. Wilson. 3 p.m. "English Furniture." By T. F. Wilson. 7 p.m. **12 noon**

FRIDAY, DECEMBER 27

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon**

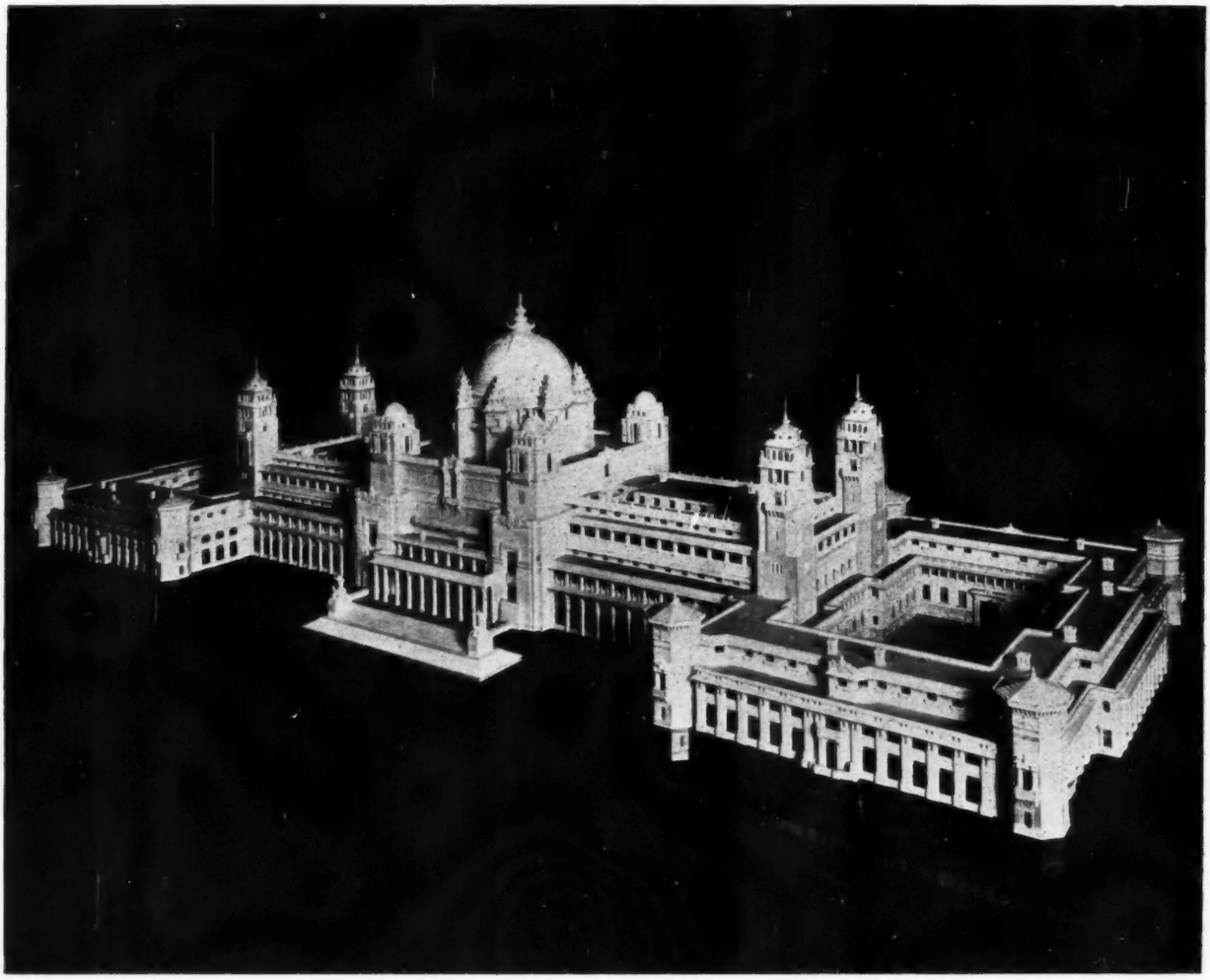
SATURDAY, DECEMBER 28

Sunrise, 8.8 a.m. Sunset, 3.55 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Mogul Paintings." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

TUESDAY, DECEMBER 31

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." 12 noon. "English Mediæval Sculpture." Both lectures by T. F. Wilson, F.R.S.A.I. **12 noon**



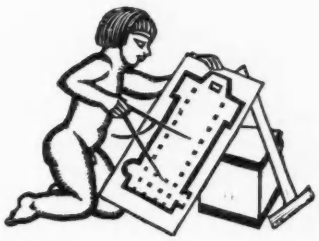
THE NEW PALACE AT JODHPUR, RAJPUTANA, INDIA

A photograph of the model of the new palace, designed by Lanchester and Lodge, for H.H. the Durbar of Marwar. The palace, the foundation stone of which was laid on November 18, is placed on a commanding site to the south of the city of Jodhpur. The central portion is planned around a lofty circular hall with a domed roof, and comprises the accommodation for H.H. the Durbar and for important guests. To the north of this is an open court surrounded by suites of rooms for the staff, and to the south is a similar court for the zenana.

The gardens will be laid out around the north, south, and west fronts. The main approach will be from the east, where there is a suite of large rooms for banquets, receptions, and other functions. Private galleries on an upper level will enable the ladies of the zenana to view these functions without themselves being seen, thus maintaining the Hindu custom of the purdah.

The model was prepared from the working drawings, and is now in the possession of H.H. the Durbar.

THE ARCHITECTS' JOURNAL



WEDNESDAY, NOVEMBER 27, 1929

THE WESTMINSTER ABBEY SACRISTY

"Now, therefore, is the time for those who are convinced that there are better schemes to bring them forward."

—THE DEAN OF WESTMINSTER'S LETTER TO *The Times*, SEPT. 12, 1929.

THE Dean of Westminster, yielding to a public agitation, agreed a few weeks ago to postpone the commencement of the actual work of erecting the new Sacristy, intended to be placed to the east of the north transept of the Abbey, until an opportunity had been given to architects and others interested in the problem to suggest alternative schemes. December 12 was fixed as the latest date at which such proposals could be received. It will be remembered that the Dean appointed a Committee of experts to help him to appraise the merits of the various schemes submitted. There is no doubt that a Committee which includes Archbishop Lord Davidson, the Presidents of the Royal Academy and the R.I.B.A., Mr. C. K. Peers, the Chief Surveyor to H.M. Office of Works, and Mr. J. F. Green, Acting Chairman of the Society for the Protection of Ancient Buildings, inspires confidence, and all lovers of Westminster Abbey will wish that its work should be brought to a successful conclusion. In order that this may be possible, however, certain conditions require to be fulfilled.

The leading article published in *The Times* on September 12 pointed out that "it is the duty of those who have schemes in mind to submit them to the Dean not vaguely but with as much particularity as they can command"; and its writer impressed upon the Committee the desirability of testing in a manner which the public may accept as thorough, authoritative and impartial "every scheme, new or old, which may be brought forward."

It is clear, of course, that the architects who submit schemes for a new Sacristy should not be encouraged to believe that they are entering for an architectural competition of the usual kind. No prize will be given to the author of the scheme which is accepted, nor is it incumbent upon the Committee to adopt in its entirety any one of the proposals which are brought to its notice. Very elaborate drawings are not necessary. Yet, surely, it is desirable that the public should know what the proposals are, and have an opportunity of appraising the thoroughness with which the Dean and his Committee have performed the work of adjudication. It is understood that the Dean is not in the least anxious to receive detailed plans illustrating proposals for the new Sacristy, nor, indeed, has he vouchsafed any very precise information as to the most convenient manner in which, in his opinion, the various cupboards, wardrobes, or other receptacles for precious articles should be arranged. He is satisfied, apparently, if he receives verbal proposals, for others besides architects are profoundly interested in the problem of the Sacristy, and they should not be debarred from submitting their ideas merely on the ground that they are not possessed of the technical skill which would enable them to produce plans.

Nevertheless, there is no surer way of clothing an architectural proposal with conviction than by the production of plans, and we are venturing to assume that the readers of this JOURNAL would be interested to have set before them all the suggestions for a new Sacristy in an illustrated form. The Dean himself has not asked for such detailed drawings, and, in deciding to publish them, we are in no way presuming to take upon ourselves the functions of the Committee itself. It is rather our intention to aid the work of the Committee by giving to the various schemes submitted to it a publicity and a clarity of presentation which will, in fact, make its task of adjudication easier. We are inviting the author of each scheme to accompany it with an explanatory note, but we shall not seek to anticipate the judgment of the Committee by pronouncing an opinion upon the various proposals ourselves. This week we illustrate a scheme which has been put forward by Mr. A. R. Powys on behalf of the Society for the Protection of Ancient Buildings. In the two subsequent weeks which remain between now and December 12 we shall be glad to publish any other proposals, provided that they are illustrated with plans.

NEWS & TOPICS

THE PARLIAMENTARY PROGRAMME

AMID the mass of legislation which the Government is flinging before a bewildered House of Commons, two measures of considerable importance seem in some danger of being forgotten. The first is the long-promised Bill dealing with slum clearance. Admittedly a non-party measure, there were hopes earlier in the Session that such a Bill might have been on the Statute Book, if not before Christmas, at least early in the New Year. Now, however, those hopes are receding fast. Although, to judge by his recent speeches, Mr. Greenwood, the Minister of Health, is still an optimist, it is difficult to see how such a Bill, if introduced, can make any progress at all until February or March of next year. When it is remembered that the question of slum clearance is bound up with that of town-planning, and that the Government hope to deal with both subjects in one comprehensive Bill, it will be seen that the prospects for this legislation are not too bright. The other measure, which at one time it was feared might be overlooked, is that for the preservation of London squares and open places. The Government now intend to introduce this Bill, probably in the Lords, early next spring.

CINEMA ARCHITECTURE

The Bioscope has not been long in replying to the criticisms of cinema architecture, which were contained in the special number of the JOURNAL of November 13. While paying a compliment upon the wealth of valuable matter collected in that issue, the editor proceeds to complain of "suggestions and innuendoes which will be read with amazement." In particular, he takes exception to the statement that many cinemas are built in a manner which makes it impossible to believe that a qualified architect has been employed on them, and he informs us that "architects *have* been employed on all these buildings, and the results must be judged with this fact in mind." Undoubtedly, "architects" have designed the buildings in question, but they have not all been "qualified" architects. I do not wish to make invidious distinctions in this matter, but I will warrant that if there were published a list of the men who were responsible for designing the several hundred cinemas which have been erected in England during the last ten years, it would be found that a large number of them were not members of the Royal Institute of British Architects, while of the remainder very few are known to the profession at large.

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One may accept *The Bioscope's* statement that cinemas are built by boards of business men whose taste is neither above nor below that of other business men engaged in manufacture or trade, and architects have no right to assume that the exhibitor in the cinema trade is a person of less taste or intelligence than the City magnates upon whose palatial offices they are glad to devote their technical and artistic skill. I think it would be agreed, however, that the controversy which was aroused by the publication of the Cinema Issue has been conducted in a spirit of good humour on both sides, and caused architects and exhibitors to entertain for each other an added mutual respect.

THE D.I.A. DINNER

The Right Hon. Arthur Greenwood, Minister of Health, told the Design and Industries Association at their annual dinner on Friday last that they had, in his view, devoted too much attention to the design of pottery and glass and furniture. He was glad to see that the Association had now turned its attention to the preservation of all that was worth preserving in the English countryside. He wisely reminded his audience that "no mere fiat of a Government can control public taste," and reinforced the remark by stating that "no legislation can make a man who ought to be a butcher into an architect." In so far as the Design and Industries Association is concerned with educational propaganda for the betterment of taste, it is doing excellent work, and in the past it has helped to foster criticism regarding the commonplace everyday objects employed in every home; but whether the D.I.A. will be fulfilling a desirable function as the humble handmaiden of the Council for the Preservation of Rural England is doubtful. In the words of the chairman, Mr. Clough Williams-Ellis, the D.I.A. is composed of "congenital busybodies," who have concerned themselves with combating "the snobbish English belief that cheap and nasty represent cause and effect." If the Association believes that it has finished its work and that industrial design is purged of nastiness, some unfeeling critic may be tempted to write as its epitaph: "Something attempted—left undone."

IN AND OUT OF THE SAVOY BAR

It is good to see the general appreciation by the architectural press of the new Savoy Theatre. I did see one adverse criticism somewhere by someone, who suggested that the new decorations distracted attention from the real purpose of the place—the stage itself. That, of course, it should not do. And one critic, otherwise appreciative, thinks it may not be too suitable for certain kinds of play. But, be that as it may, what a relief the whole thing is! I nosed into the building some weeks ago, when the decorators and builders were still at work, and felt that at last we were to have a real theatre. For which of us has not in those intervals between acts been faced with the need of controlling an almost irresistible longing to borrow a hatchet from the fireman and get going on the cupids and swags of the old regime? And lest the bar takings suffer by reason of our being able to sit still and either muse on the play we have come to see or to sleep comfortably, Mr. Ionides has given us a charming little bar where it is to be hoped the drinks will live up to their surroundings. A pleasant, jolly place to be in, anyway, the rejuvenated Savoy. If the play is good, so much the better. If it is not, it is still a pleasant place.

MUNICIPAL OWNERSHIP OF LAND

The question of the municipal ownership of land has an important architectural aspect. Civic design is so often thwarted by the conflicting interests of adjoining building owners that the extended powers which municipalities have in recent years acquired for the purpose of facilitating street improvements are welcomed by most people of public spirit. It is not easy, however, to determine the extent to which a municipality should assume the status of a landlord. The Finance and Improvement Committees of the London County Council, during the course of last week, were obliged to give careful consideration to the policy to be adopted with regard to their surplus lands. The bulk of this property has been acquired in connection with improvement schemes. When an improvement has been carried out, the Committees conclude, the original object in acquiring the land has been fulfilled,

and any surplus which is not utilized for the improvement scheme should be disposed of as soon as its value has been established. By this means the Council, on behalf of the ratepayers, would be able to recover a part, at least, of the enhanced land-values which are due to improvement schemes initiated by itself.

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If the Council were to retain possession of the land as an investment, it is possible that a still larger profit might eventually be got from it; yet there is much to be said for the policy of immediate disposal of such surplus land, in order that the proceeds derived therefrom may be devoted to other improvement schemes. In coming to a decision, however, it is incumbent upon a municipality to take a long view, and not too hastily to part with land which may one day be required for some worthy project of civic design. I note with satisfaction that the Finance and Improvement Committees of the L.C.C. consider it desirable to retain for the present the surplus lands at Charing Cross Road, Shaftesbury Avenue, and Coventry Street, in view of future possibilities that may arise out of the Charing Cross Bridge scheme.

SOUTHWARK TOWN HALL SCHEME

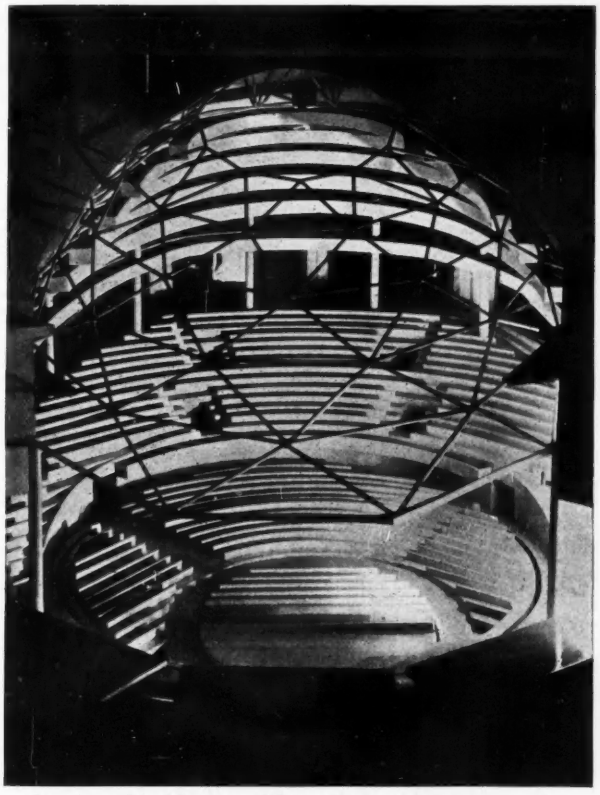
This problem of deciding as to the relative need for civic architecture and housing accommodation has recently been occupying the attention of the Southwark Borough Council. It is indeed a difficult matter to decide whether the ratepayers' money should be expended upon a much-needed town hall at a time when there is a considerable shortage of houses in the district. At first sight it seems obvious that it is more important that as many as possible of the inhabitants of the locality should be housed decently than that the town councillors should meet in a building which possesses an architectural dignity appropriate to its function. Yet the most ardent housing reformer would hesitate before recommending that all public architectural work should be postponed until the housing question had been completely solved. It seems necessary to strike a mean in these matters, and to remember that civilization is one whole, and should be advanced all along the line.

THE CITY'S BANKSIDE PROPERTY

The benefits to be derived from the municipal purchase of land are occasionally devoted to an object different from that for which it was originally intended. The Corporation of the City of London at present owns a considerable amount of property on the Bankside area which was to be utilized for the approach to the proposed St. Paul's Bridge. As this bridge will not now be built, the suggestion has been made that the property might with advantage be transferred to the Borough of Southwark for the provision of much-needed housing accommodation for the residents. Room could be found not only for a number of blocks of dwellings, but for a pleasant riverside promenade, free from vehicular traffic.

A "TRIPLE-PHASE" THEATRE

The view above does not, as might seem probable, depict a new kind of mechanical top, but a scale-working model of a "complete" theatre which Professor Walter Gropius has designed to meet the very exacting requirements of Herr Erwin Piscator, the well-known Berlin theatrical producer. Under a single roof it combines all three forms of the theatre: the circus, in which the arena is entirely surrounded by spectators; the amphitheatre



A scale-model of Professor Walter Gropius's "Totaltheater"—circus, amphitheatre, and theatre in one.

with its convex, crescent-shaped proscenium and open landscape background; and the totally enclosed modern theatre building, with its sunken stage cut off from the overhanging tiers of the auditorium by the mystery of the drop curtain and the no-man's-land support-trench concealing the orchestra. The transformation from any one to any other of these three types of stage can be rapidly and noiselessly effected during the performance; or alternatively, all three types can be employed simultaneously. In a few seconds the whole floor space of the stalls, together with its occupants, can be lowered several feet, while they and its focal point transcribe an angle of 180 degrees with an ease which would have enchanted Euclid. The actors can either emerge from stairs below the stage, or descend by others placed above it. In shape this "*Totaltheater*" is elliptical, the roof being supported on twelve slender and carefully-spaced columns. One innovation which it incorporates is of special interest. This is an auxiliary device for heightening the effect of particular scenes enacted on the stage. The theatre assumes the circus shape, and the entire circuit of its interior wall is flooded with one continuous cinematographic frieze of, say, the tumult of the ocean's waves, or an onrushing mob or army. Overhead, meanwhile, lowering storm clouds float across the roof, the Milky Way hovers serenely, or a sunset waxes and wanes.

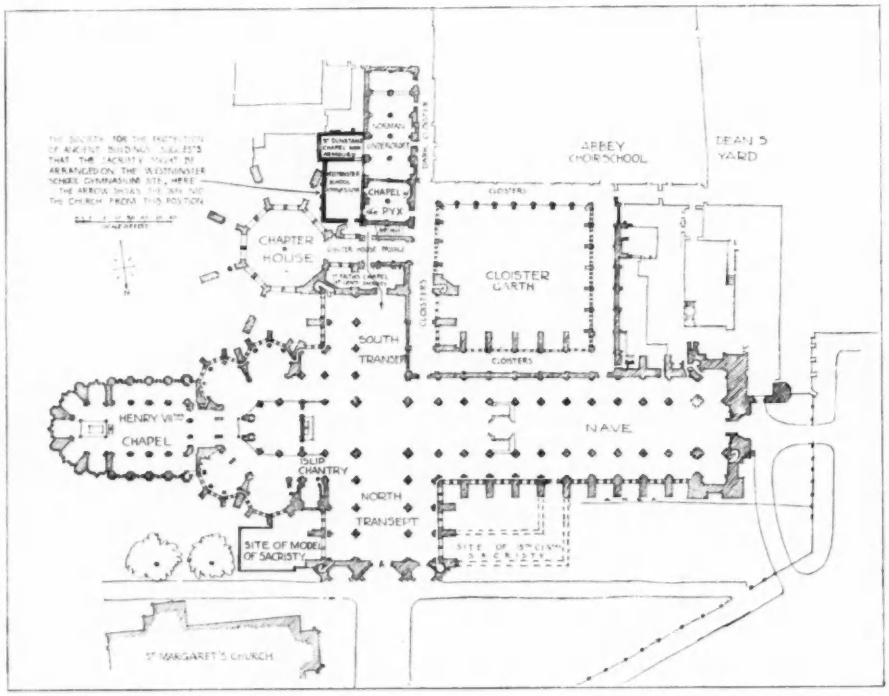
PASSING PARK LANE

"I don't know what architecture is coming to these days," said Mrs. Ponteley-Dere, raising her stately gaze to as high an angle as propriety allowed; "all walls and windows!"

ASTRAGAL

ALTERNATIVE SCHEMES FOR THE ABBEY SACRISTY

i. : The S.P.A.B.'s Choice (Westminster School Gymnasium)



The plan of the Abbey, based on that in the Ancient Monuments' Inventory. This key plan illustrates the feasibility of carrying altar frontals through the various doorways involved, which are taken in sequence, proceeding from the Abbey to the gymnasium, in the measured sketches on the opposite page. The library stairs, therein referred to, may be seen here, adjacent to Chapter House Passage.

BEFORE the Dean of Westminster called together a responsible committee to advise him in the matter of the proposed Sacristy for the great church in his charge, I suggested to the Editor of THE ARCHITECTS' JOURNAL that it would be desirable to give the public information in regard to the site which the Society for the Protection of Ancient Buildings thought to be the most suitable, that is, when the practical needs of the church and the respect due to it as an ancient building were balanced and the result adjusted.

The site of our choice is that of the Westminster School Gymnasium. The present may be thought to be the time when it may be most useful to the public, and even to those who are considering the case officially, to make the relevant facts and figures known. I want, however, to make it clear that in writing this article I do so with proper respect for the action lately taken by the Dean and Chapter.

The accompanying plans show the positions of the Westminster School Gymnasium and of St. Dunstan's Chapel and their distances from the church.

The chief reasons in favour of this site are :—

1 : That this land and the buildings thereon should be Abbey and not School property. St. Dunstan's Chapel is a fourteenth-century building, and is ceiled with a beautiful panelled, ribbed and bossed flat-boarded ceiling of the fifteenth century. It now contains the outfit for the gymnastics of the School, and, accompanying its use, there is some danger of fire. It is a lovely building, and should be cleared of its choking fittings and become accessible for the public for prayer or for inspection only.

2 : The site is large enough, and its use would harm and disfigure no old part of the Abbey buildings, beyond those already screened by it; except for opening out an old Norman arch now blocked with later medieval work. This arch is between the School gymnasium and the library stairs (Sheet 4).

Against this site are two main objections :—

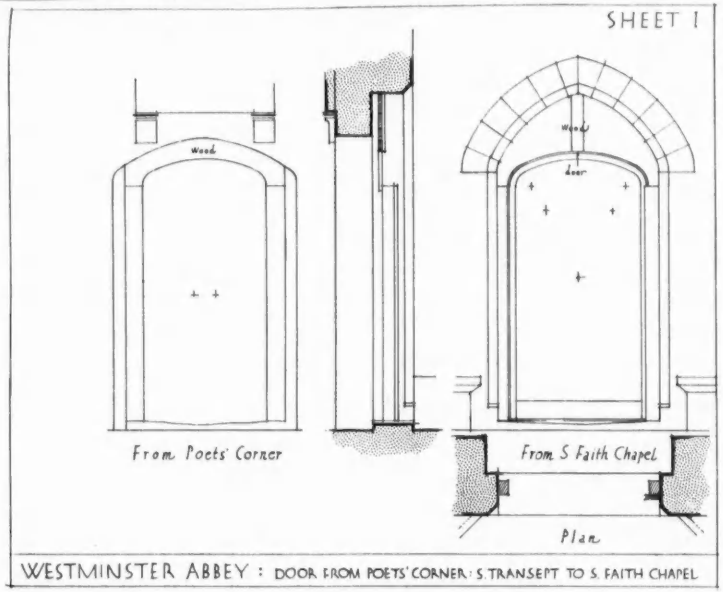
1 : The relatively great distance from the church.

2 : The fact that one way to it, perhaps the most convenient one, passes across the Chapter House passage and St. Faith's Chapel (key plan). The crossing of St. Faith's Chapel is particularly objectionable by some; for this lovely thirteenth-century chamber, once the Sacristy of the church, is now used by the devoted for private prayer.

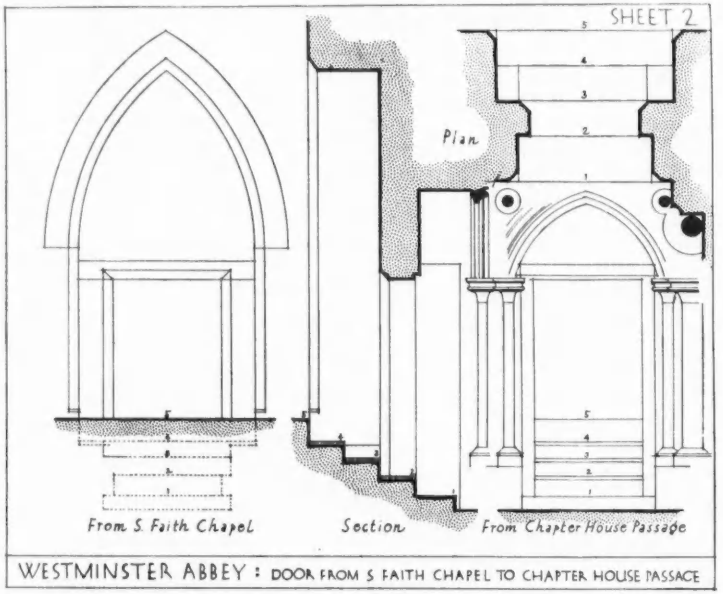
These objections the Society would answer by saying that since all will agree that this site should be Abbey property, it would be fitting to try at least for a generation whether this site will not in practice prove suitable as a Sacristy in spite of its distance. If it did, in fact, prove inconvenient, another site could *then* be chosen. In regard to the present use of St. Faith's Chapel, the actual numbers using it were found to be 244 for the week ending November 2, an average of forty a day. It is suggested that, in spite of the dear associations that this building has now gained to itself, another chapel might be provided, perhaps even St. Dunstan's itself.

Again, it is thought that the doorways between the north transept and the gymnasium may be considered to be too low and too narrow. Their actual heights and widths are as follows :—

The door (Sheet 3) from the space under the library stairs

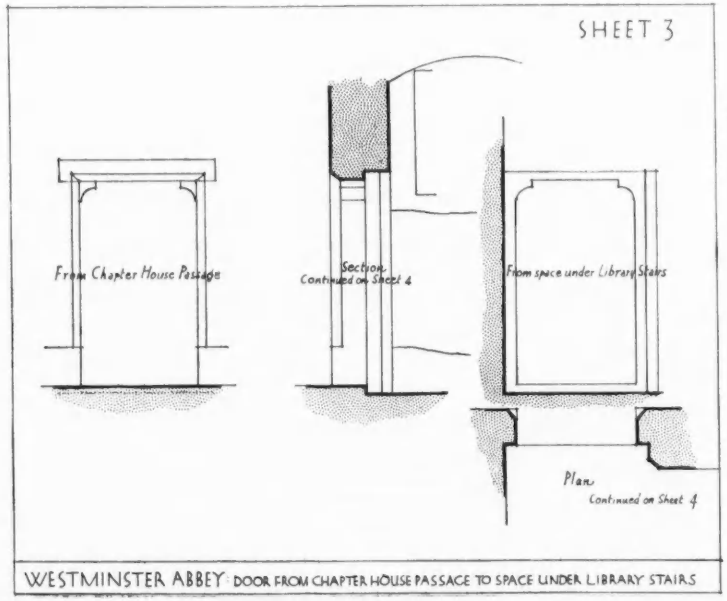


Sheet 1. The height of this door is about 10 ft.; the width 3 ft. 1 in.

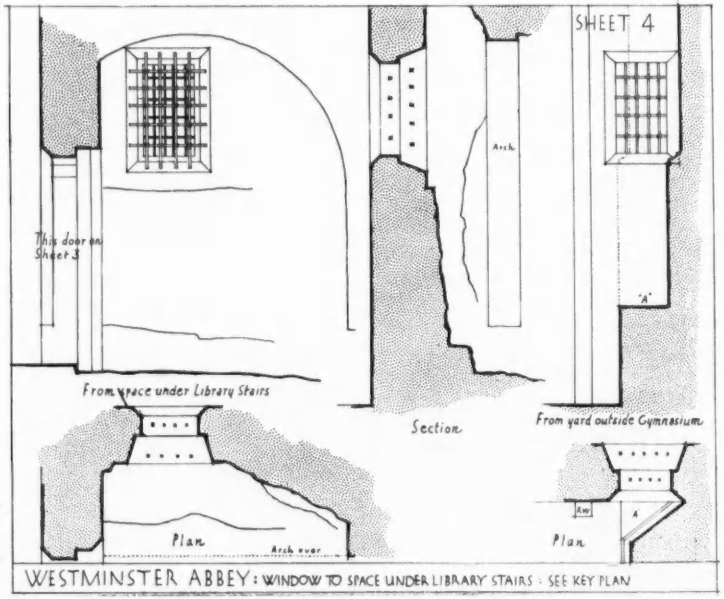


Sheet 2. Here the width is 3 ft. 4 ins.; the height 6 ft. from step.

[*For scale of these drawings, see sheet 5, page 830.*]



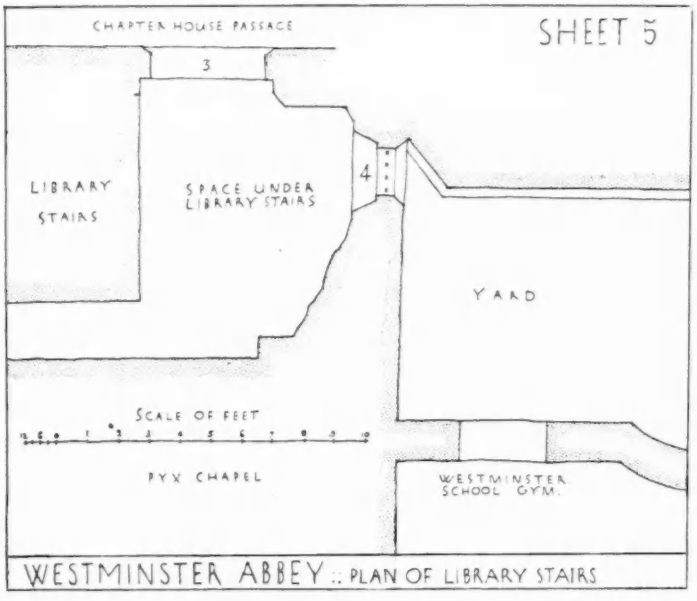
Sheet 3. The doorway measures 3 ft. 9 ins. by 6 ft. 4 ins.



Sheet 4. The Norman arch between gymnasium and library stairs (see sheet 5).

to the Chapter-house passage is 3 ft. 9 in. wide and about 6 ft. 4 in. high. The door (Sheet 2) from the Chapter House passage to St. Faith's Chapel (there are five steps here) is 3 ft. 4 in. wide and 6 ft. high from the step below the arch. It would be possible to rearrange the steps a little to gain more and better headroom. The door (Sheet 1) from St. Faith's Chapel to the south transept is about 10 ft. high and 3 ft. 1 in. wide.

If it is thought that the way from the gymnasium under the Norman arch is difficult because of its bends, a test on the plan (Sheet 5) would show that it is possible to carry a 15-ft. altar frontal this way without inconvenience or difficulty. I do not know the length of the High Altar, but I doubt if it is as long as this.



This plan of the space under the Library Stairs, to a larger scale than the key plan on page 828, should be read with particular reference to Sheet 4

In case the Sacristy is ever needed for the formation of a procession to enter the Abbey, it would, in fact, probably be found convenient to arrange for it to move across the Undercroft and down each alley of the cloisters and so into the church. The cloister is open to the garden, but it is thought that it is sufficiently sheltered to render it immune from serious complaint on that score.

The chief reasons why the Society favours this site are that it should be Abbey property, and this is an opportunity to make it so; and, seeing that a Sacristy is needed, the use of this site disfigures the valuable old buildings less than any other.

A. R. POWYS,
Secretary, Society for the Protection of Ancient Buildings.

MEASUREMENT OF DAYLIGHT ILLUMINATION: CASE SETTLED ON TERMS

THIS was an action by Mr. Percy John Waldram, an expert in the measurement of light in connection with buildings, against Mr. John Swarbrick, another expert in the same field, of John Dalton Street, Manchester, for an injunction restraining him from printing or publishing matter or diagrams relating to the measurement of daylight illumination of which Mr. Waldram claimed to be the author. The plaintiff also claimed an injunction restraining the re-publication of five articles entitled "Easements of Light" from THE ARCHITECTS' JOURNAL, in so far as they contained matter or diagrams of which the plaintiff claimed to be the author. The case was heard by Mr. Justice Clauson.

Mr. Swarbrick denied that the plaintiff was the author or owner of the copyright in the works mentioned, or that the articles in question contained anything the copyright of which was the plaintiff's, or that he intended to publish any diagrams or drawings which infringed it.

Sir Thomas Hughes, K.C., who appeared for the plaintiff, said twenty years ago there were no satisfactory instruments for measuring daylight in buildings, and it was not until Mr. Waldram set up the standard of measurements by foot candles that there was any reliable method of doing so.

His method was recognized by Mr. Justice Eve in 1922 in an action against the Bradford Corporation, which was the first in which it was used. Mr. Waldram, proceeded Sir Thomas, lent Mr. Swarbrick some documents, in which he owned the copyright, for articles in a professional journal which Mr. Swarbrick was writing. He also helped Mr. Swarbrick in writing them. But though Mr. Swarbrick published the articles, Mr. Waldram contended that the diagrams in them were his property.

Sir Herbert Cunliffe, K.C., for defendant, said where his client found that Mr. Waldram did not consent, he abandoned publication of the diagrams, though he did not go so far as to admit that the copyright was the plaintiff's.

Sir Thomas said it was only when the defendant proposed to put them in book form that plaintiff said he must claim the copyright. That was what led to the trouble.

On Friday last, following the suggestion by his Lordship the previous evening, a settlement of the action was arrived at.

Sir Thomas Hughes said he was grateful to his Lordship for the assistance he had given. He then read the terms of settlement arrived at by the parties.

Mr. Swarbrick, by his counsel, declared that he was anxious to acknowledge the great assistance Mr. Waldram had rendered to the investigation of the problem of light determination and the debt which all in this matter owed to him for his services. Mr. Swarbrick also acknowledged the most generous and unstinted advice and assistance given him by Mr. Waldram in the preparation of the five articles in THE ARCHITECTS' JOURNAL. Mr. Swarbrick agreed not to use or reproduce the diagrams other than the calculating diagram, but he was to be free to use the calculating diagram and to publish it, provided that in the publication where it was published the words "Waldram calculating diagram" were used.

It was agreed that either party was to be free to use any matter from the letterpress of the five articles, but it was understood the articles were not to be reprinted by either party as they stood. It was clearly understood that there was no imputation against Mr. Swarbrick's professional or personal honour. All proceedings to be stayed by consent and each party to pay their own costs.



The entrance front: doors are bright green; wall lettering, bronze; panels, Ancaster stone.



The front to Occupation Road, and south gable end. Brown and purple bricks are used.

"ROSE & CROWN"

Cambridge's Bronze Medal Public House

DESIGNED BY BASIL OLIVER

THIS public-house, recently selected by a jury of assessors—four architects and five laymen—as the best building erected during 1928 in the area administered by the Essex, Cambridge, and Hertfordshire Society of Architects, will shortly bear a tablet commemorative of the award, the first to be made in this district. And the bronze medal and diploma of the R.I.B.A., to which the Society is allied, will be presented to the architect, Mr. Basil Oliver, in respect of it, at the Society's dinner at Chelmsford on December 12.

One of the conditions being that the building selected for what is henceforth to be an annual distinction must have a frontage to a public thoroughfare, it may be presumed that the assessors carefully weighed the merits of the external elevations, which, modest as they may be, yet reflect the dignity of a tradition essentially English. The

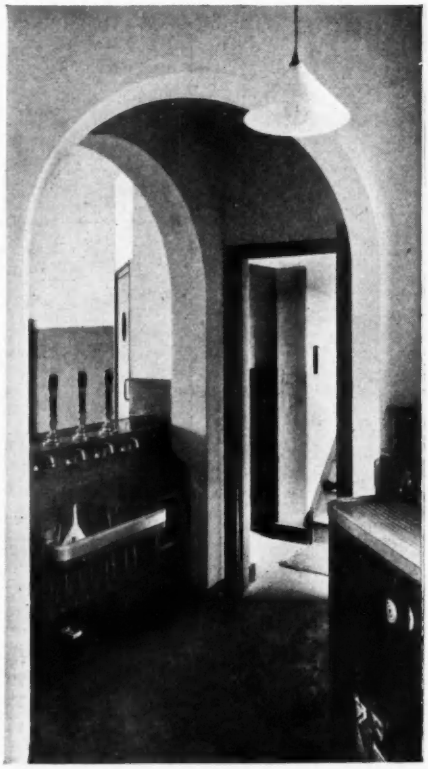


"Rose and Crown," Newmarket Road, Cambridge. [*By Basil Oliver*

Details of the ornamentation to the main front. The Rose and the Crown panels are carved in Ancaster stone, which is also used for the bolection-moulded surround to the doorway. The medallion over the door is in glazed terra-cotta; the lintols over windows are of adzed English oak.

walls are faced with Luton bricks—browns and purples, with a few reds, the browns predominating—and the roof is of hand-made, sand-faced pantiles. Ancaster stone has been employed for the bolection moulding surrounding the main door and for the panels of the Rose and the Crown above—all these having been carved and masoned by Laurence A. Turner, F.S.A. In the tympanum over the doorway, specially designed to take it, is the medallion of the owners, Messrs. Greene, King and Sons, Ltd., designed as a standard emblem for all their public-houses by George Kruger Gray, F.S.A., and carried out in glazed and coloured earthenware. Mr. Oliver himself suggested the pun (" green king.") He also designed the hanging sign seen to the left of the splayed front. On the other front it will be noticed that the rain-water pipes and heads take a definite place in the design. The heads were designed by the architect many years ago for the manufacturers. They are of cast iron, lead-painted, and with dates gilded and ornaments tipped with gilding.

It is on stepping within that the visitor appreciates the inspiration that has gone to the planning. The J-shaped site was not, at first sight, one that lent itself to the formation of so noble a



Looking from behind the counter in the public bar servery towards the stairs leading up to the clubroom. The top of the counter is fitted with green linoleum, the oak fronts are formed of all-flush laminated wood.

room as the clubroom, occupying the splay in the heel of that letter. A glance at the plans of the ground, first, and second floors will show how neatly and economically the problem has been solved. This clubroom is in the form of a rectangle, with symmetrical curved ends, in one of which is the fireplace, of roofing tiles, with a statuette in the niche above; on the wall of the other is one of the large Frank Brangwyn posters designed for the L.N.E.R.

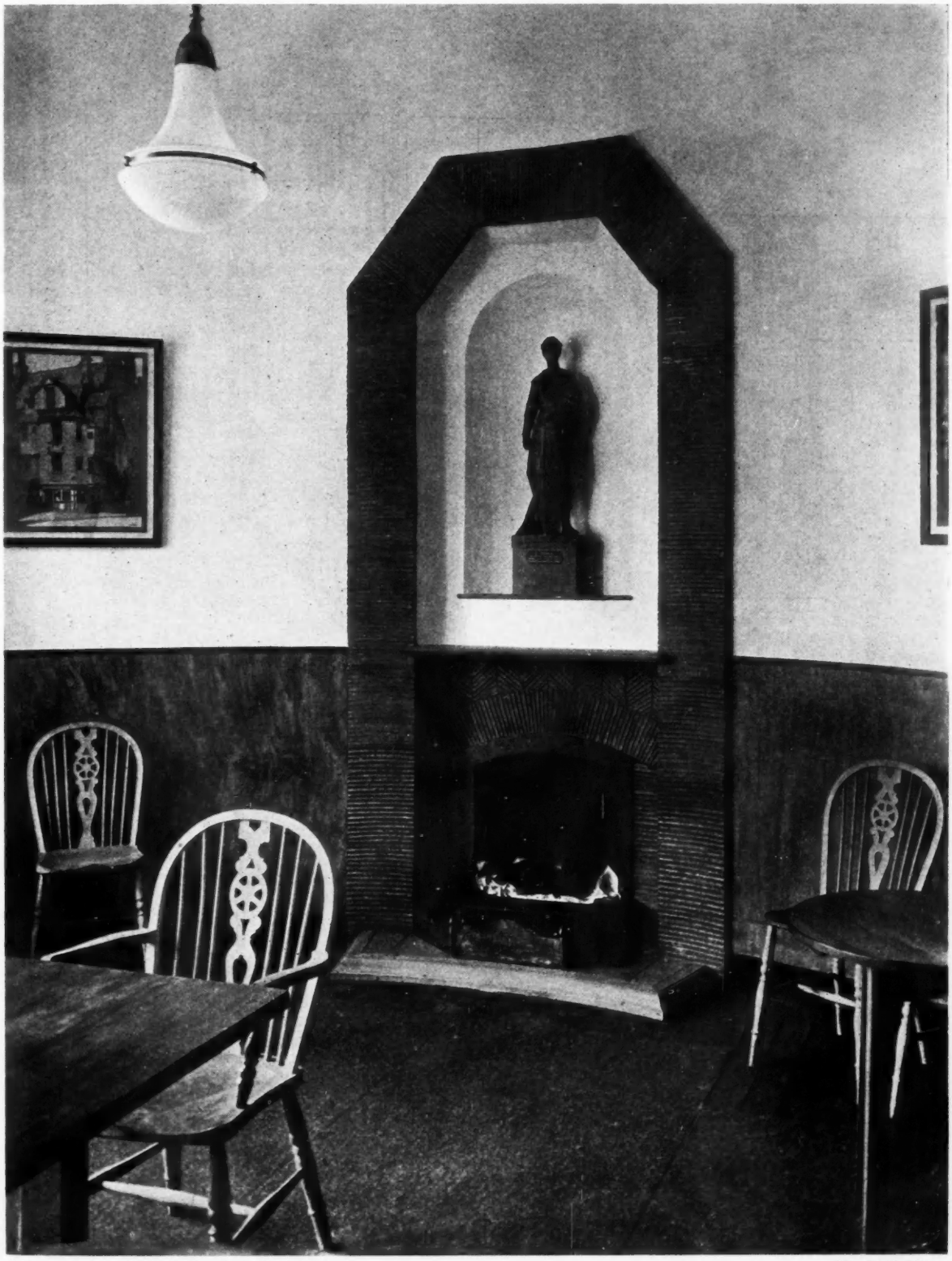
By way of novelty, dadoes are formed in several rooms of mottled linoleum, of tones to correspond with the general colour scheme; above these the walls are, in most cases, distempered in cream. The most modern ideas are also traceable in details. For instance, doors and other fixtures are in laminated wood; and the furniture, in some cases designed by the architect, includes tables that have a cellulose finish, and are therefore proof against spotting and staining.

In a public-house more than in other types of building there are a multitude of fittings that must be carried out by the building contractor himself, and it is pleasant to hear from Mr. Oliver that he deeply appreciates the expert craftsmanship provided by Mr. William Sindall, of Cambridge, and his staff. The contract price was £4,440.



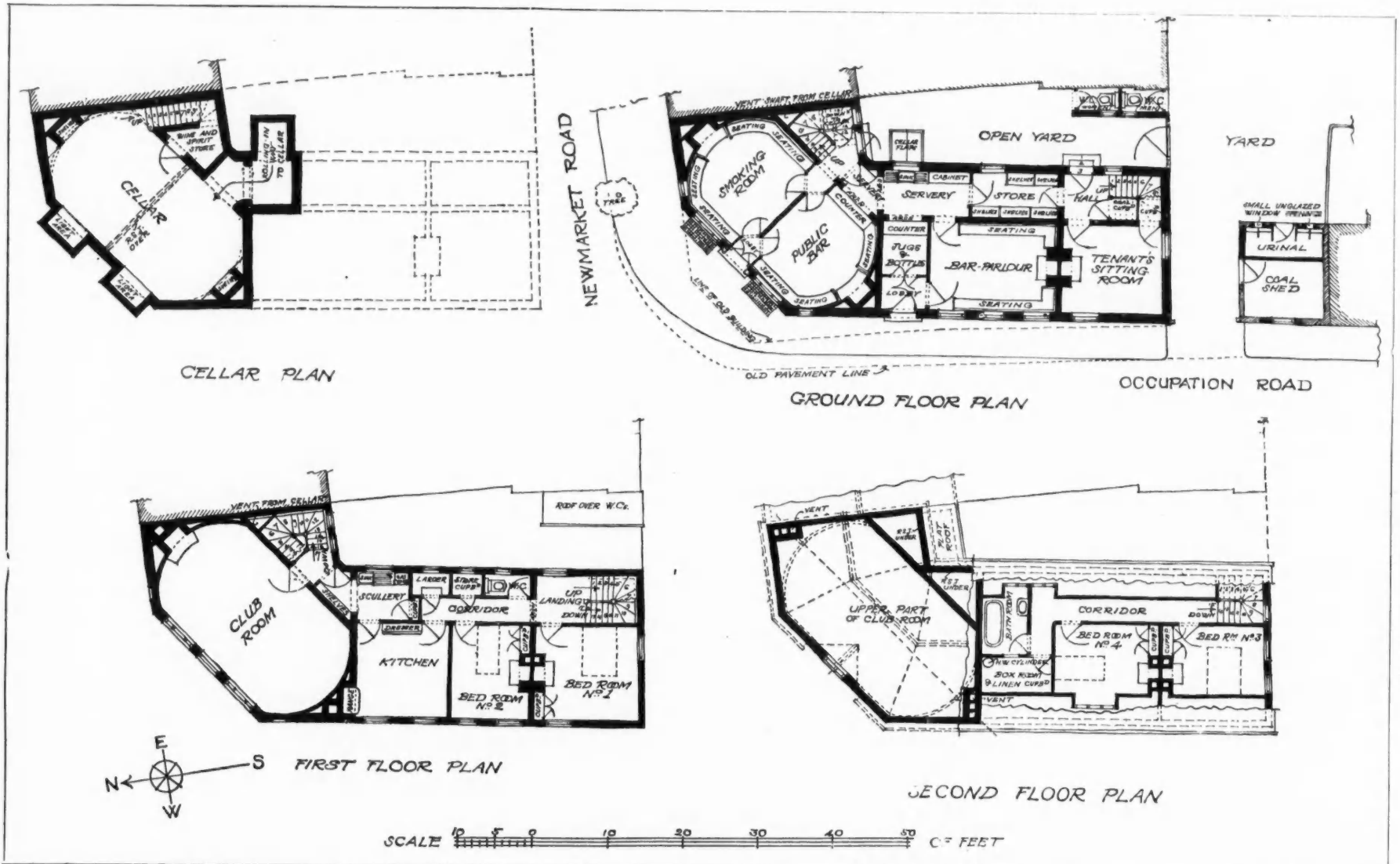
" Rose and Crown," Newmarket Road, Cambridge.] *[By Basil Oliver.*

The fireplace in the bar-parlour is furnished with an oak mantel, has polished Ancaster stone cheeks, and a heaped fire-grate ; the hearth itself is of black dull-glazed tiles. Above the dado of mottled green linoleum the walls are distempered in cream. The slatted seating, with backs upholstered in green leather-cloth, was made by the builder.



"Rose and Crown," Newmarket Road, Cambridge.] *[By Basil Oliver.*

The clubroom extends through the first and second floors, and is lit by the windows above the main entrance. It is rectangular in plan, but with symmetrical convex ends, in one of which this fireplace is the central feature. The fireplace is built of roofing tiles, with whose colour the mottled red linoleum used for the dado has been selected to harmonize. The walls above, and the ceiling, are cream distempered. The floor is of Columbian pine, wax polished, with a natural colour hair carpet upon it. The tables are also of Columbian pine, with tops of Western hemlock, cellulose finished. The wheel-back chairs are waxed, but not stained. In the niche is a plaster cast of the St. George, of Donatello, from the Victoria and Albert Museum, bronzed.



"Rose and Crown," Newmarket Road, Cambridge.] [By Basil Oliver.

The architect's plans, from cellar to second floor. The site resembles roughly the letter **J**, *and the outstanding point of the planning is the manner in which the principal rooms have been splayed across the tail of the letter, and formed symmetrically and with curved ends, so as to make the utmost of the area. The clubroom is a lofty apartment, and has the kitchen of the tenant's maisonnette adjacent to it on the first floor, so as to allow of occasional dinners being served. The bars and serveries on the ground floor are particularly compact and convenient in arrangement.*

WAREHOUSE, SHOWROOM & OFFICES, PIMLICO, S.W.

DESIGNED BY MESSRS. PARNACOTT

THE site of Ambron House, the new warehouse, showroom, and offices of Messrs. Ambrose Wilson, Ltd., corset-makers, is situated between Vauxhall Bridge Road and Chapter Street. The main front faces Vauxhall Bridge Road, the busy thoroughfare near Victoria Station. Originally the front of the site was occupied by tenements, and the rear portion was vacant land. At first it was intended to build upon the rear portion and leave the remainder until a future time, but, owing to the dangerous condition of the tenements, it was decided to pull down and complete the building.

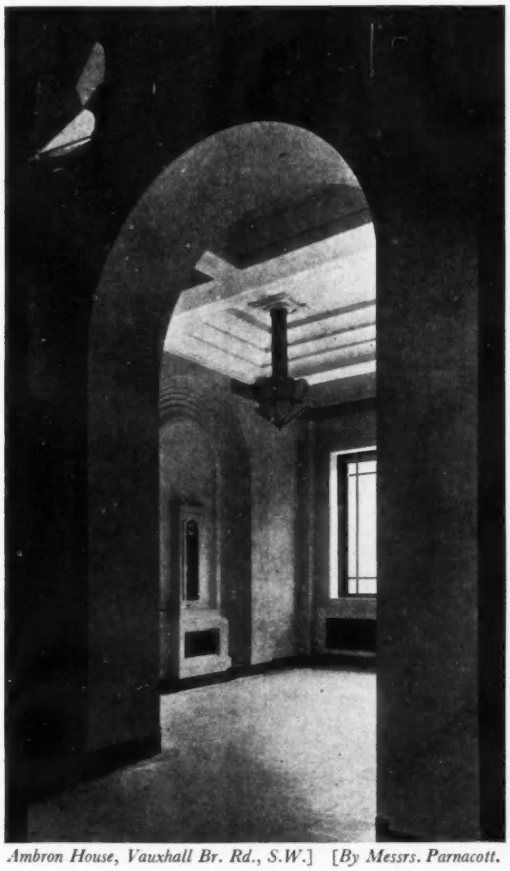
Both elevations are treated in brickwork. On the main façade the ground-floor story is in stone, with a solid black granite balustrade protecting the area to the basement. At a certain height the front elevation had to be set back to conform with the stipulations laid down by the ground landlords. To overcome the noise of the traffic in the street, double windows are fitted to all the private offices.

The main entrances to the building are from Vauxhall Bridge Road. That on the left leads to the showroom, at the back of which, behind the counter, are seven fitting rooms, each heated by means of radiators. To the right of the showroom is the travellers' room, and beyond the dispatch department. In Chapter Street there are two subsidiary entrances, planned one on either side of a cartway, which can be closed with roller shutters. This cartway leads to the loading platform, situated within the building, and adjacent to the dispatch department and the goods lift. The dispatch department is surrounded on three sides with glazed screens, and is connected to the cartway and loading platform by sliding doors.

The right-hand entrance doorway on the main front leads to the entrance hall, the main staircase and lift. The hall is treated in stuc, with the marble flooring and staircase in Buxy, with a border of Castilian.



The main front faces Vauxhall Bridge Road. The building is of brick, and the ground-floor story of the front elevation is of stone. A solid black granite balustrade protects the area of the basement.



Ambron House, Vauxhall Br. Rd., S.W. [*By Messrs. Parnacott.*

In the main entrance hall. Another view of the hall, looking towards the stairway, appears on page 840.

On the first floor are a large warehouse, occupying nearly the whole site of the building, and three small offices. This floor is somewhat similar to the second floor, reproduced in plan on page 836. In the latter case, however, the major portion of the floor is occupied by the general clerks' office. On this floor also is a small hospital room.

A general clerks' office also occupies the greater portion of the third floor. Here there are also three small offices, stationery store, and telephone exchange.

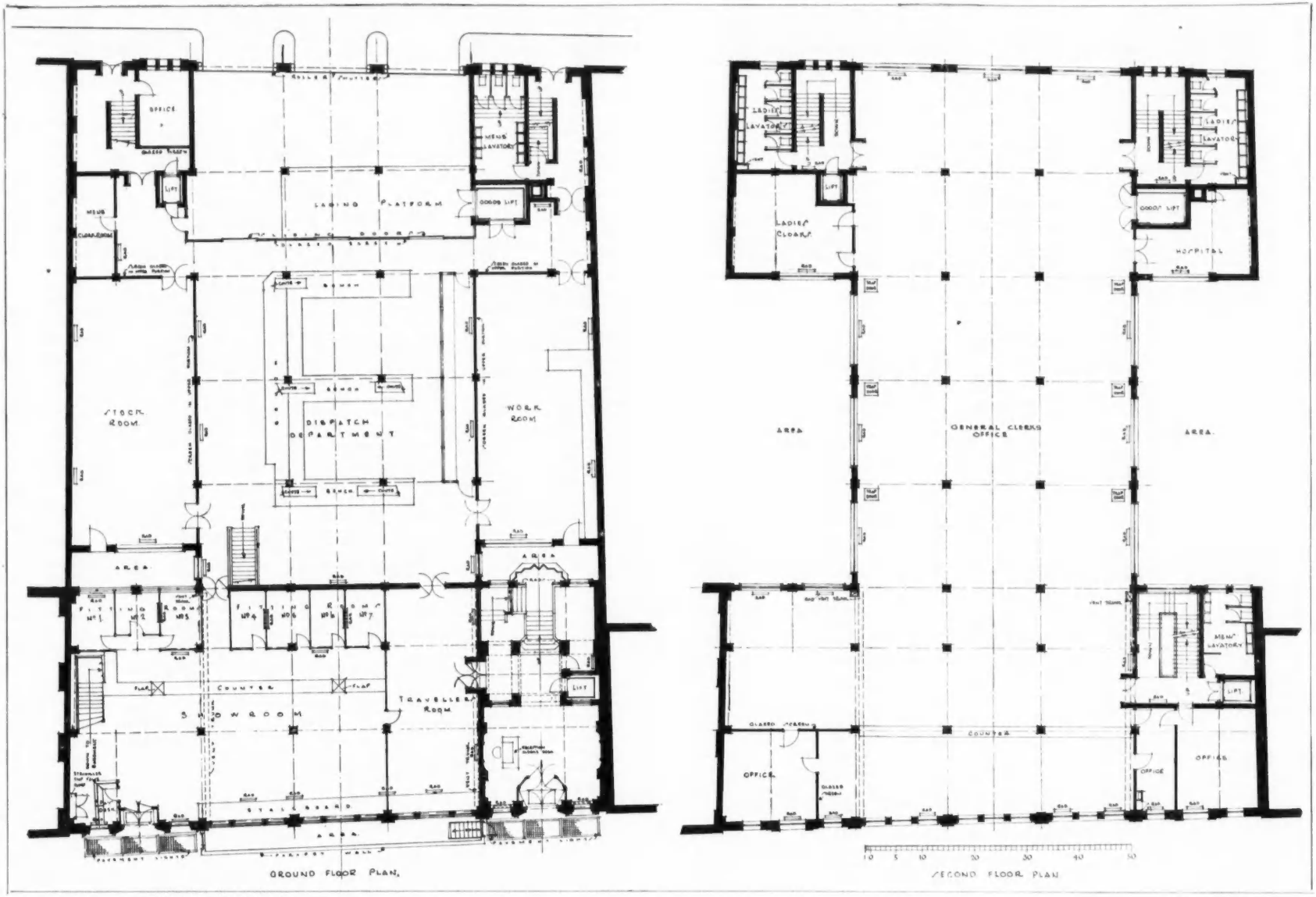
The fourth and fifth are perhaps the most interesting of the upper floors. On the fourth are a large general staff dining-room, two small private dining-rooms, one of which is for the exclusive use of ladies, kitchen, refrigerating room, and servery. The fifth floor occupies the front portion of the building only, and overlooks Vauxhall Bridge Road. On this floor are the board room, offices for the director, manager, and secretary, and general and other offices.

On the sixth floor are the caretaker's flat (consisting of a living-room, three bedrooms, kitchen and bathroom), a rest-room, ventilating plant room, and lift gear room.

In the basement are, in the front of the building, a warehouse, meter room and store, and at the rear, approached from a separate entrance, and on a small portion of the site, the transformer-room, boiler-room, fuel store and lift.

The whole building is of steel-frame construction, with hollow tile floors and brick panel walls. All the floors are protected from fire by sprinklers, and fire-resisting glazing has been fixed to the windows overlooking the areas and Chapter Street.

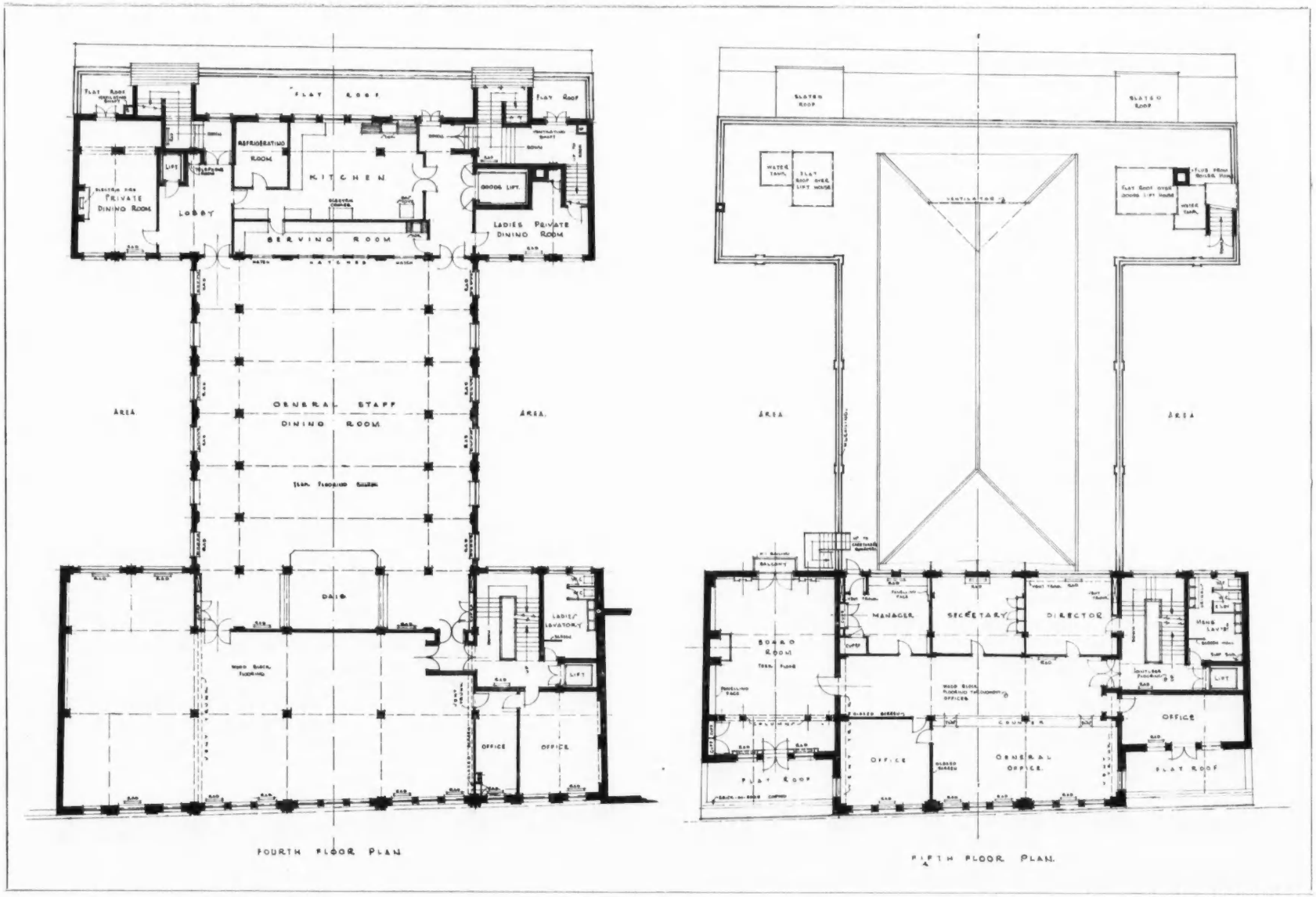
C



Ambron House, Vauxhall Bridge Road, S.W.] [*By Messrs. Parnacott.*

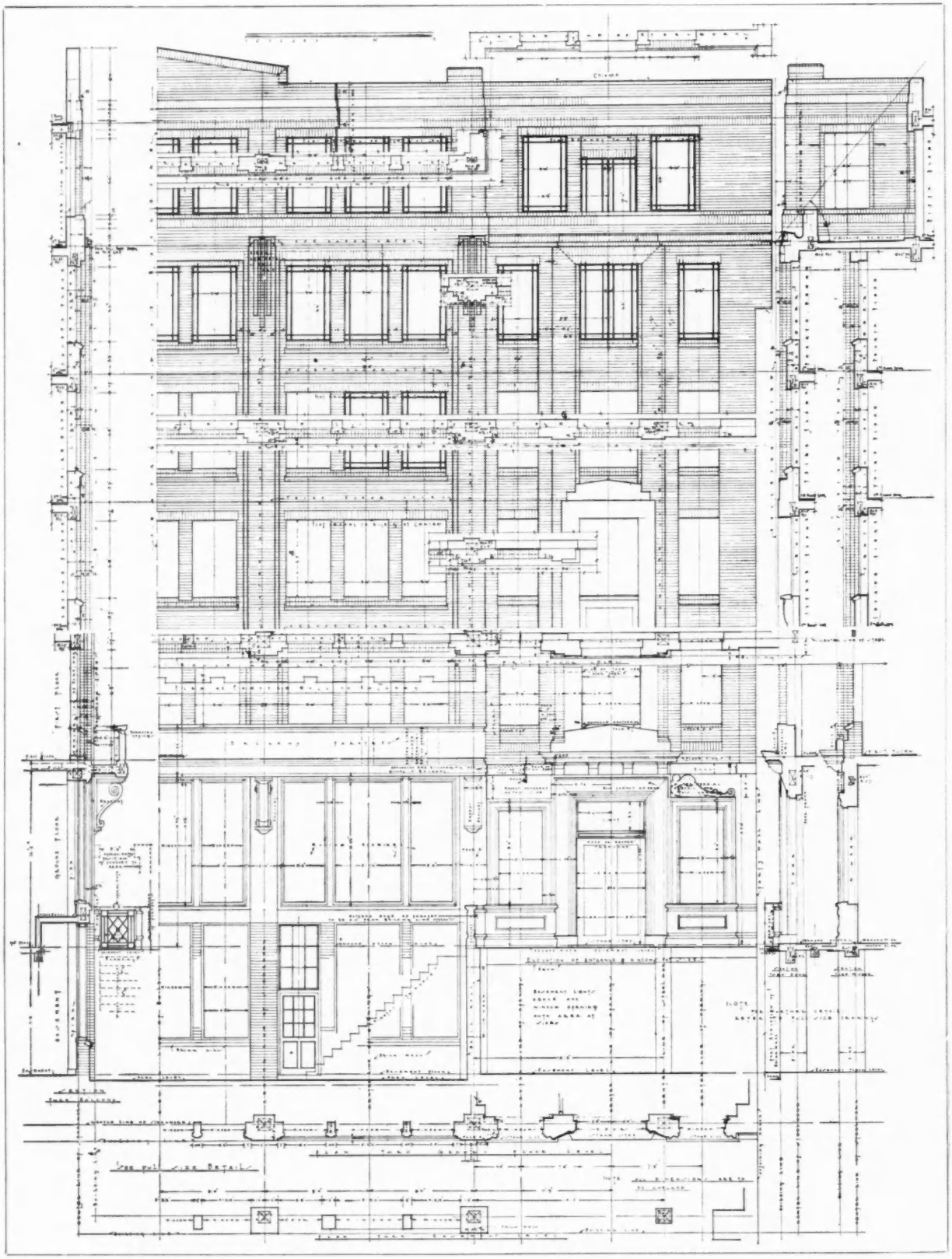
Ground- and second-floor plans. The building stands on a site situated between Vauxhall Bridge Road and Chapter Street. There are two entrances and a cartway in Chapter Street. From the main, Vauxhall Bridge Road, front, the left-hand entrance gives direct access to the showroom, with its fitting rooms; the other leads to the entrance hall, principal staircase, and lift. The owners of the building are corset makers.

Ground- and second-floor plans. The building stands on a site situated between Vauxhall Bridge Road and Chapter Street. There are two entrances and a cartway in Chapter Street. From the main, Vauxhall Bridge Road, front, the left-hand entrance gives direct access to the showroom, with its fitting rooms; the other leads to the entrance hall, principal staircase, and lift. The owners of the building are corset makers.



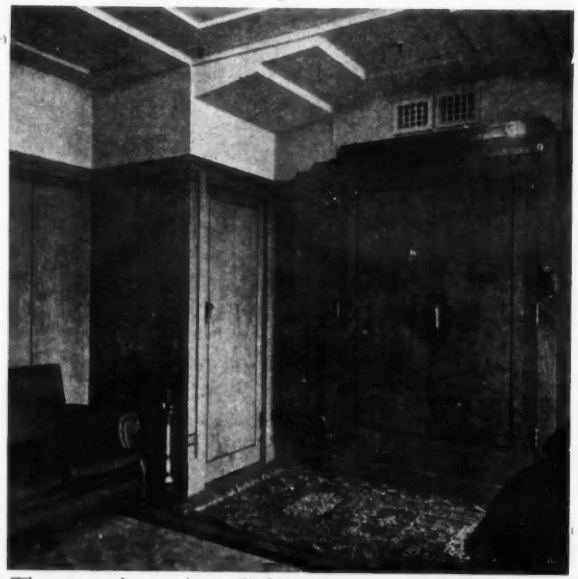
Ambron House, Vauxhall Bridge Road, S.W.] [*By Messrs. Parnacott.*

Fourth- and fifth-floor plans. These are perhaps the most interesting of the upper floors. On the fourth floor are a large general staff dining-room, and two small private dining-rooms, one of which is for the exclusive use of ladies. On the fifth floor are the boardroom, and the offices of the director, secretary, and manager. The building generally is planned in large working areas, without division walls, and provides nearly 1,000,000 cubic feet of space.

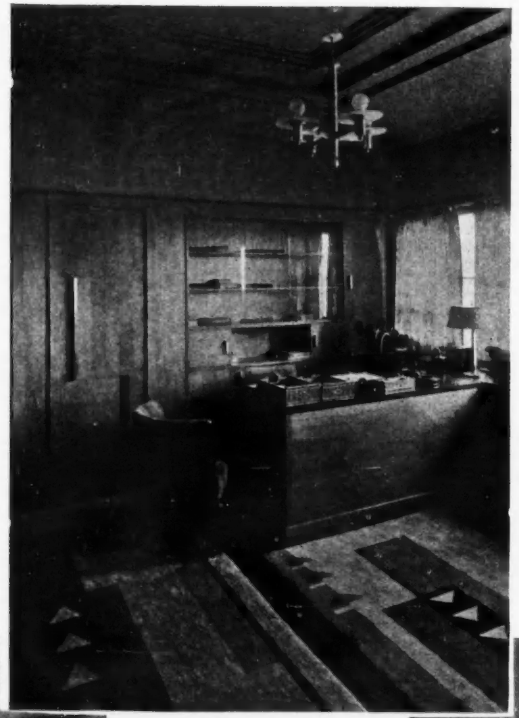


Ambron House, Vauxhall Bridge Road, S.W.] [*By Messrs. Parnacott.*

The architects' working drawing of the right-hand half of the main (Vauxhall Bridge Road) elevation.



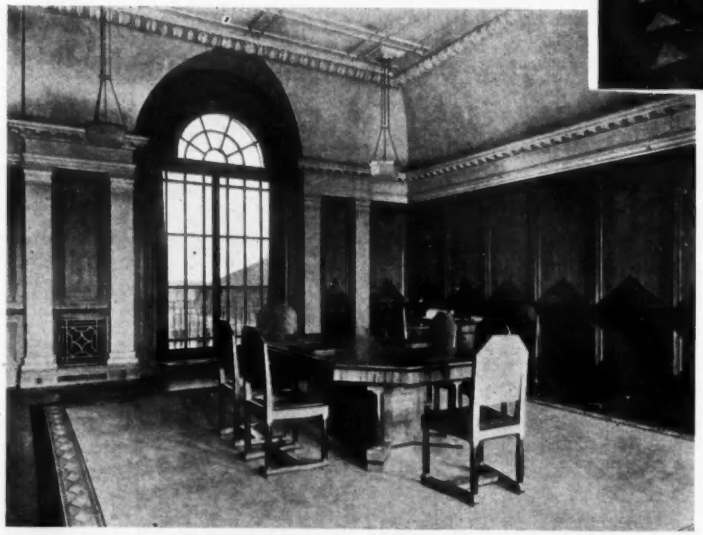
The manager's room is panelled in grey sycamore, inlaid with ebony.



The director's room. Untreated oak is used for the panelling.



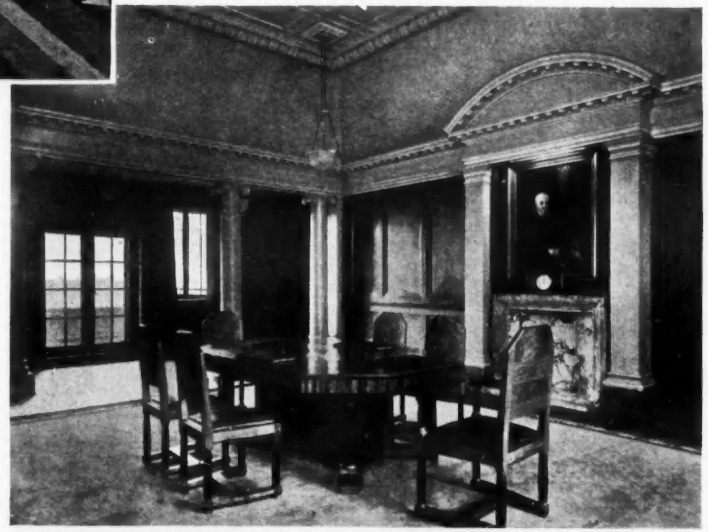
In the secretary's room the panelling is of deal, painted white.



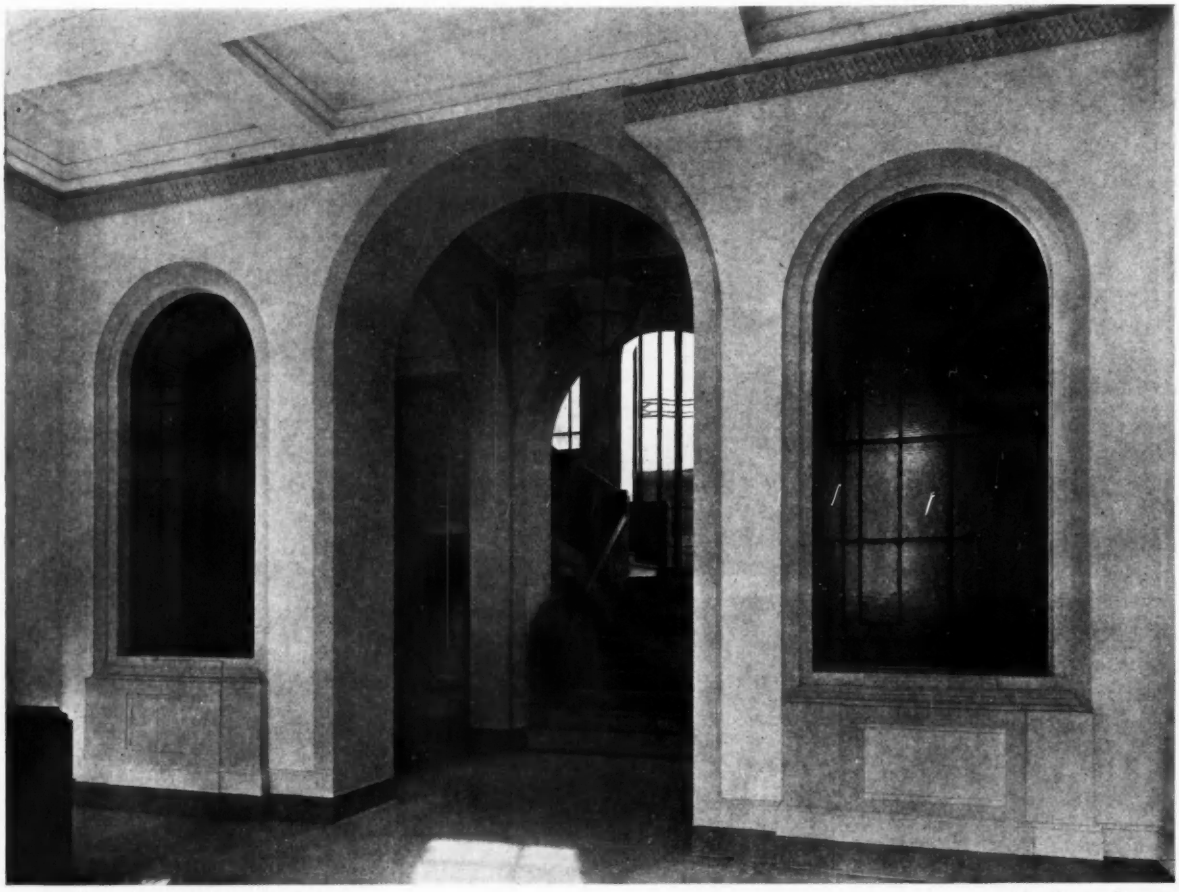
Australian walnut and fibrous plaster are employed for the decoration of the walls and ceiling of the boardroom.

ON THE FIFTH FLOOR

Ambron House, Vauxhall Bridge Road, S.W. By Messrs. Parnacott.



Above the fireplace in the boardroom hangs a portrait of the founder of the firm, Mr. Frank Derry. The fireplace is of marble.



Ambron House, Vauxhall Bridge Road, S.W.] [*By Messrs. Parnacott.*

A view from the main entrance hall, looking towards the stairway. The hall is treated in stuc, with marble flooring, the staircase being in Buxy, with a border in Castilian. A photograph taken in the reverse direction is reproduced on page 835.

THE ARCHITECT

His Beginnings and Ends

A SELF-PORTRAIT BY CLOUGH WILLIAMS-ELLIS

Last week appeared the author's story of his first commission. This week's excerpt from the autobiography, announced for publication in book form today by Geoffrey Bles, recounts his experiences in Flanders during the war-period.

ii: Interlude (1914-1918)

AS a war interlude is, it is to be hoped, even less typical of the normal professional career than anything else I may have to record about my own architectural development, I shall very gratefully dismiss it with the briefest sketch.

Even as an ex-trooper of the Inns of Court M.I., one had a certain military prestige in that August of 1914, and I was quickly given a commission in one of the early Service Battalions, which, however, I left for the Welsh Guards on that regiment's formation.

I can think of nothing more tedious or disillusioning than perfunctory soldiering. The only hope, it seems to me, is to exalt every detail of the whole strange cult into an elaborate dogma, to which perfect and exact conformity is ruthlessly exacted ; and certainly the profession of arms took on a quite new interest for me from the day I joined the Guards.

But I lacked, and knew well that I lacked, the first essential for a good regimental officer—the ability to distinguish between, and really know, my individual men. I was, am, and ever shall be, almost imbecile in my inability to remember faces, and it was by no means unknown for me to parade hopefully in front of any likely-looking platoon that might or might not be my own, but which, unluckily, quite often wasn't.

Adjutants' faces on such occasions are exceptions to my disastrous rule, and my memory is stored with a little gallery of vignettes in which the contorted features of outraged authority still glower at me, though now remotely, ludicrously.

Having become a practising architect within six months of the word " Go ! ", I had had visions of finding myself on active service within at most as many weeks of first drawing my lieutenant's pay—a bounty entirely unlooked for, as I had imagined myself a " volunteer " and therefore unrewarded. As a fact, it was over a year before I reached the trenches, but then dramatically enough, and so suddenly that, being recalled from four days' leave in Wales by a

telegram that was brought out to me, tree-planting with my wife, I was in the front line of the ill-famed Hohenzollern Redoubt, actually shying bombs at undoubted visible Germans, before the week was out.

I said the "front line," but in that shattered and corpse-strewn labyrinth that was still mostly held by the enemy, it was very difficult to tell just where you were, which way you were facing, or which saps, craters and trench fragments we were supposed to be holding.

Such, then, was my first real taste of the war—a slow crawl up to this ambiguous and sinister fortress from our shell-harassed billets in what had lately been Vermelles, a warning that a counter-attack was expected at any moment, that the position must be held at all costs, and that, my company commander having suddenly gone sick, his command devolved upon me. But the battle of Loos, which had just been bloodily yet fruitlessly fought over this terrain, had left both sides exhausted, and our spell in this sector came to its appointed end without providing any item of interest for the newspapers.

With me there remains a remote yet nightmare memory of blear-eyed watchfulness, of a strange feeling of serene inadequacy in a setting of explosions, death and ugliness which, grotesquely macabre, was of some quite other world than mine. In short, for the sake of my own sanity and peace of mind, I seem to have contrived to take a curiously detached view of the whole war so far as my own part in it went, and—in my own mind—to have disclaimed responsibility for it or its conduct or its conclusion, and generally to have reserved the right to remain fatalistically critical.

It was not the heroic attitude. I merely found myself being conventionally dutiful in a rather grudging and resentful fashion, yet making myself as useful and efficient as I could, because one clearly owed that much to one's side as well as to oneself, and because the awful abyss of unfathomable boredom so clearly yawned, ready to engulf me, the moment I relaxed my zeal—morbid, if you like—for my new and strange profession.

I have known no tedium so utterly blistering as that of the routine of trench warfare in a relatively quiet sector, with its interminable sequences of "front line," "reserve," "rest billets," the monastic isolation from the real world, the interminable days and nights for regretful, yearning dreams of home and of life as it had been, as it might be now save only for this bloody war, as some day it might yet even be again—if . . .

Always and for ever that provisional, day-to-day, unsettling "*if*." Increasingly it had to be accepted that a little wooden cross was what one could look forward to with more certainty than anything else; but there was not much planning to be done with regard to that probability—so one planned, with what conviction one might, for pleasanter if remoter eventualities.

Meanwhile, we were supposed to be killing Germans. Actually, we were mostly just eating our heads off and our hearts out, killing *time*.

I sent home for my water-colours and did sketches of trench and billet scenes, and of such architectural fragments as were within reach, until it grew too cold and the colours froze upon the paper. Then I distracted myself by getting an ex-schoolmaster stretcher-bearer in my company to come round to my dug-out or billets and give me lessons in Welsh with his Bible as our reading book.

Any off-time when we were back in rest, I would borrow a horse and go off exploring with a Baedeker, a sketch-book and a map. Once I got into trouble through tying up my mount in the fascinating little hill-town of Casel, then, forgetting all about it, getting back by car and lorry lifts. I had to return to fetch it, and then found I could not find nor identify the creature, not having remarked its colour, size, sex or anything else about my means of conveyance on this, one of my greatest sprees of the war. I never pretended to be able to remember a man's face, so why should I be expected to recognise that of a horse I had barely met—on a day, too, when I had eyes and thoughts for nothing nearer than the healing architectural intimacies of this little market town, its merrily-spinning windmills, and the naïve decadence of its First Empire chateau?

Ultimately, the horse was somehow recovered, and I prolonged the rare and grateful savour of this short escape from the war by the writing of two articles on what I had seen and thought, that were accepted by a London weekly.

Also, I had occasional books sent me for review. I made plans for all manner of buildings, possible and impossible. I snooped around on horse-back and on foot, and generally eked out a meagre little spare-time peace-life within the imprisoning nightmare of the war.

Yet it was these peculiar employments of my off-duty days that were to shape my war-time destiny. They came to the knowledge of Divisional Headquarters, which, needing a sort of trench-ferret assistant to the G.S.O.3, "borrowed" me from my battalion as Guards Division Intelligence Officer. In that capacity my map-reading, sketching, reconnoitring and reporting propensities could all be employed; and, with few routine duties and a general roving commission, I contrived to lead a less devastated existence.

The production of panorama pictures of the enemy's works as seen from our own front line now became a recognised part of my military duties. Survey plans of our own trenches and redoubts were in constant demand, with notes on their condition, and also confirmation or otherwise of doings on the Germans' side as reported by battalion observers. One spied from Artillery O.P.'s, and occasionally from an aeroplane or observation balloon; and once in a while one got arrested and detained by zealous officers in neighbouring sectors, suspicious of the pryings of a not perhaps very convincing Guards officer.

Brigade or Divisional Headquarters, moreover, quite often meant architecture—once the fairy-tale towered and moated castle of Esquilbec, whilst we were out of the line; and then vaults in the great ramparts of Ypres, whence I could, unofficially yet conveniently, explore the tragic though still beautiful ruins of the town I had known and loved whilst it was still serenely obscure and before war had made it famous and a rubbish-heap. Amongst its shell-eroded buildings, that day and night the enemy's guns were further pulverising, little architectural fragments could still occasionally be found, and my Brigadier and I had begun to make quite a notable collection in our headquarters cellar, especially of wrought ironwork, when our pleasant partnership was dissolved by his being shot through the head.

My next spell in the Salient was after the Battle of the Somme, when the corps to which I had been attached as acting G.S.O.3 withdrew there to recover from that offensive and repair its appalling losses. It was just then by way of being a quiet bit of the line, with not much doing on either side, yet it was always disagreeable enough and highly unpopular on account of its wretched and waterlogged trenches and the everlasting shelling.

Some day, however, someone would, no doubt, have to storm the High Command Redoubt that so insolently dominated our low-lying front line, and, if successful, to pass beyond it down into the Steenbeke valley and, with luck, up and over the next rise and away beyond our limited horizon. So a "Book of the Beyond" must be compiled from observation, from the depositions of refugees, from maps and photographs, and every other imaginable source, and so might the Intelligence Department justify its tedious hibernation in a static warfare sector, and so perhaps be kept usefully amused and out of mischief.

Had I known that, a year later, I should myself be intimately and responsibly involved in this battle that now seemed so remote and problematical, should find myself, indeed, creeping furtively up the Steenbeke itself, reconnoitring for likely crossing-places, my interest in this mostly invisible enemy hinterland might have been less academic and perfunctory.

I attempted to start a light supplement to the official daily Intelligence Summary, to be called *The Ypres Gazette and Salient Advertiser*, but the proposal did not please Authority. Then I turned my attention to the invention of various lethal devices, and later to man-traps for catching Germans alive for identification purposes. I actually got a series of them made, to be buried and camouflaged in No-Man's-Land and to be baited with dummy British corpses. The enemy had only to step on one of my machines to be painlessly yet firmly secured by one or both legs, whereupon a flare would automatically illuminate him and give warning to our sentries, who would then haul him in on his sledge-mounted trap by a wire hawser.

Though having high official blessing, and though I offered to set my catch-'em-alive-oh traps myself, no front-line unit would allow the experiment to be made on its particular sector, and, like the trench-mortar man, I was always passed along with cordial recommendations to a neighbour. It was generally held, I still think wrongly, that my unconventional methods of warfare would provoke the enemy to vindictive reprisals.

As it was, I was just ill with the black, despairing boredom of it all, and applied to return to my battalion. And then, suddenly and most blessedly, *leave!*

But this time, after only a day or two of the golden intermission that made life still worth living, came a telegram ordering me back to France—not because of some emergency or disaster, but that I might complete my corps quota to some wretched G.H.Q. course. To do a fellow out of his leave for a thing like that—a leave that, as always, might well be his last, and was in my case still that strange and hectic war-time thing, a honeymoon in half-yearly instalments! I had been enraged before, but never with such dumb, impotent bitterness—there was just nothing to be done but report myself immediately.

The course turned out to be an excellently-conducted one on reconnaissance that I found interesting enough until, a day or so after its beginning, I fell in a faint for the first and last time in my life, and went sick with a sharp attack of 'flu. In retrospect, it all looks suspiciously like a bit of dirty work by my subconscious self, deeply and darkly plotting for the completion of my interrupted leave, or at any rate avenging it. And, what is more, and what I believe is unusual, its protest took what proved to be the most practically effective form possible, and as I could perfectly well be spared at the moment, I was soon after granted special compensatory leave, in which I entirely recovered.

But even my subconscious self was not all-knowing—it did not guess, I imagine, that a certain convalescent drive I took in a car, impudently borrowed from the Town Major of St. Omer, was to change the complexion of the war for me as completely as anything could.

I had heard fabulous tales of our New Hope—the Tanks—and that their discreet headquarters were not so very far away. Determined to see and hear what might be anyway possible of this mysterious arm, I boldly called on the commanding officer, a joy-riding subaltern, with no better credentials than my highly unofficial curiosity.

Fine soldier and leader that he was, there was, to me, something engagingly unmilitary about the commander of the tanks, who welcomed me with informal friendliness, sat me down by the fire to tea and buttered toast, and proceeded to talk at length, amusingly, yet with evident enthusiasm, of his tanks.

I came away a hot partisan; and when, shortly afterwards, a whip came round for volunteers for the new corps, I put in for the command of a tank section. It seemed, however, that I was still to be kept to my reconnaissance line, and in that capacity I went to the Third Tank Brigade for the Battle of Arras.

Followed, so far as I and my Brigade were concerned, the chastening Third Battle of Ypres, the exhilarating tip-and-run affair of Cambrai, the interlude of the last great German offensive, and finally the various battles of our own victorious sweep. On the 29th of September, the day of the opening of the famous Second Battle of Cambrai, my immediate superior, the chief staff officer of the Tank Corps Intelligence, was severely wounded in the head whilst, as usual, in the thick of the battle, and on this occasion himself actually fighting and repelling a local counter-attack.

I met him being carried back from this exploit, his fifth time of wounding, and found myself promoted to fill the place he had invested with an almost legendary gallantry as best I might contrive. But I had been well schooled by him, things were now at last really coming our way, and before I had made any blunders that might have justified my being relegated to more becoming obscurity, the Armistice was rumoured and then finally announced.

Ending the war thus accidentally as a staff officer at Tank Corps Headquarters gave me free access to the Corps Commander, and I was not slow to ask him about getting home—for good. To be kept on for an army of occupation or some such aftermath of horror had been my abiding nightmare, and I was not going to risk that last detention if lobbying or wire-pulling, however flagrant, could possibly avert it.

Sir Lawrence Weaver, good friend, asked for me as a superintending architect at the Ministry of Agriculture, with a special brief for small holding building, at that time all the mode, and that performed the necessary operation of turning me into a "Pivotal Man" urgently needed at home for reconstruction. Confronted with this carefully-prepared emergency exit, my General still demurred. It seemed that a history of the Tank Corps and its part in the war was required, and further that he desired that I should write it. Ultimately, he agreed that this might best be done at home, where I should have the great advantage of a professional author to help me, in the person of my wife—and so, on the understanding that the book would certainly be produced, I was freely released and was home for good within a fortnight of the Armistice.

I had scarcely intended the war, architecturally so barren, thus to occupy a whole chapter; but as it has obtruded itself to this extent, I ought perhaps to justify its prominence by indicating what seem to have been its effects upon me and my career.

I discovered that what I cared about was not defending England, but having an England really worth defending. I saw a fabulous destruction of life, wealth and beauty continued for years—a destruction that I not only witnessed but assisted in. It was all hateful to me, and the monstrous *waste* of those years still frightens me even in retrospect.

I am confirmed in my original suspicion that war is the most disastrous madness for all concerned, and my abhorrence of it has inevitably led me to take an interest and even some small part in politics. Incidentally, it has left me greatly questioning much that in the old days I had happily accepted as right, or at any rate as inevitable.

But from the purely professional point of view, the first and most obvious results of the war were pleasant commissions from various comrades-in-arms, and from no less than four General Officers. One was permitted, it seemed, to express pacifist views, so long as it was generally known that one had failed to live up to one's principles!

[NEXT WEEK: iii—DAILY BREAD]



ENGLISH PRECEDENT No. 91

ST. PAUL'S CHURCH, RECTORY ROAD, CLAPHAM, S.W.

An optimist, looking at this photograph, might hold that the shapeliness and grandeur of the big pediment are enhanced by contrast with the deformity of the little one somebody has tacked on to it sideways. Certainly in the ruin of the general effect there is the cold comfort of an object-lesson: massiveness and flimsiness cannot often have been more tellingly juxtaposed.

The Classical Revival preached that a church by its architecture should suggest the idiosyncrasy of the saint whose name it bears, following the supposed practice of the temple-builders to the gods of antiquity. This is a church of St. Paul, built in 1815, and manly and stern, like that Saint's church in Covent Garden. Its appropriateness may well be accidental, since the same architect, Christopher Edmonds, twenty-five years later, built a church in Southwark to St. Peter that is of the most unprincely Gothic conceivable.

Probably the severity of the Clapham church is due chiefly to its style, the style of the Rationalist school led by Soane and Plaw. The cornice, which in carpenter's classic of the eighteenth century had reverted to its primitive material but kept the form that masons had given it, is here restored to its proper character of eaves. The walls are unadorned, the architectural expression is got only by spacing and proportion. The original design of the east end is lost, since an incongruous Romanesque chancel (not bad of its kind) was added in Victorian days.

The beautiful site of this church was formerly occupied by the ancient parish church of Clapham.—[H. S. GOODHART-RENDEL]

LYMORE HALL, MONTGOMERY

When it became apparent that Lymore was doomed, a subscription was started by members of the Society for the Preservation of Ancient Buildings, and others, in order that a complete survey might be made and a record kept of the house and its fittings. The accompanying drawings form a part of this survey. Elevations and plans were reproduced in our last issue. They should be compared with the views on p. 848.



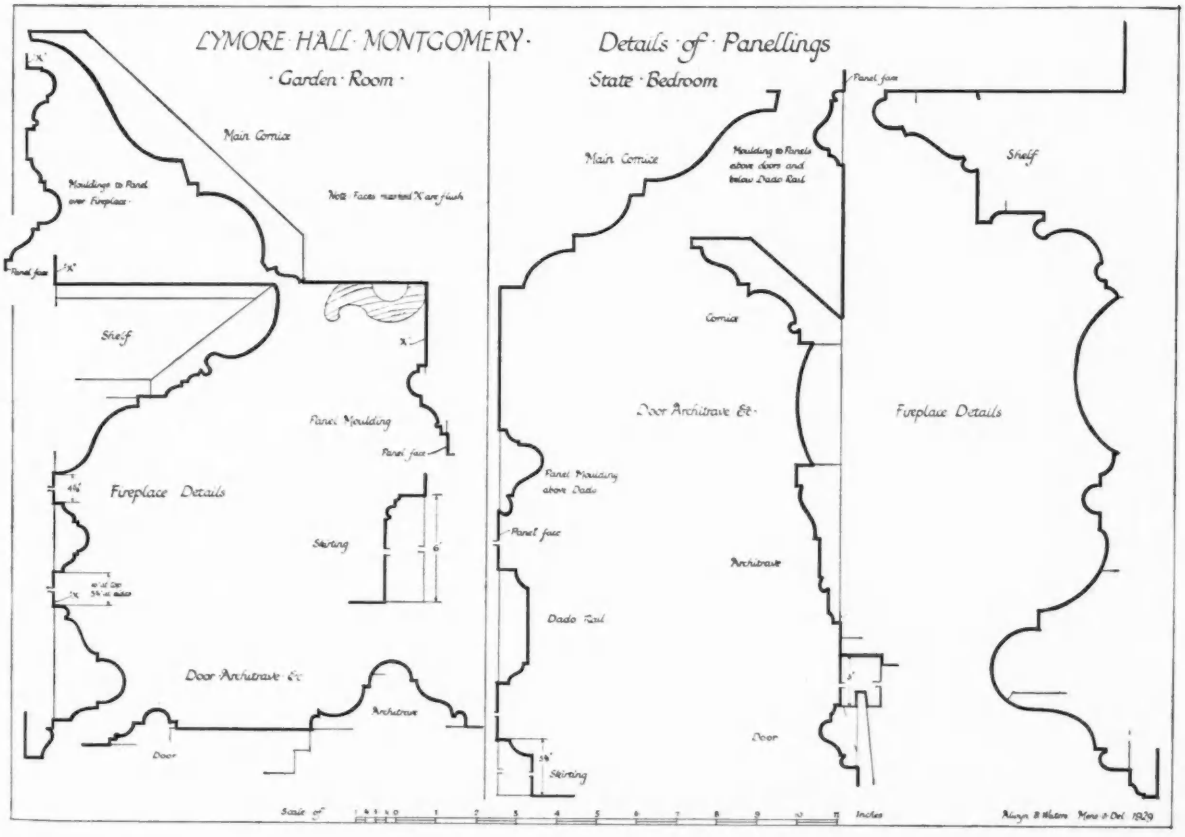
An early sketch of the north elevation, showing the original six gables.

LYMORE Hall was enlarged from an existing hunting lodge, by the third Lord Herbert of Cherbury. The family had then no residence of any size, the Black Hall, Montgomery, having been destroyed by fire; and Montgomery Castle demolished, in 1649, by order of Parliament.

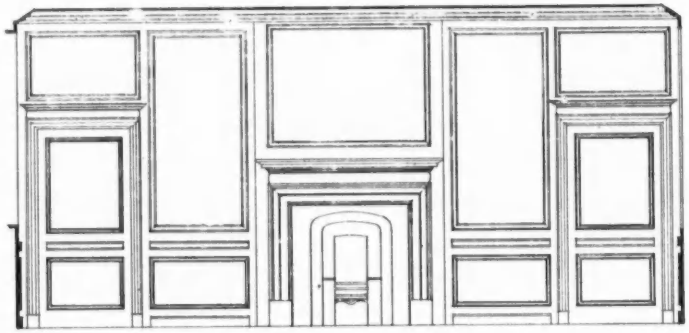
There would seem to be three distinct stages in the history of Lymore. The original lodge forms the existing south block (containing the Burgess Hall), and was refaced with brick at some later date. In 1675 the main block was added, with its west wing; and this wing, together with the Buttery and Kitchens of the lodge, was pulled down in 1749. A complete survey and valuation of the estate was made in 1785, which included a plan of the house. Mr. T. E. Pryce, in a description of this plan, says: "Quitting the house by the door leading from the Servants' Hall into the modern open courtyard, a passage and staircase formerly stood between two open spaces, termed on the old plan 'open airy,' leading to a large wide passage, one portion of which cut off the Brew House, still existing, from the Great Kitchen. Another portion, turning to the left, led to the Buttery next to the Great Hall; on one side of this was, and is now, a butler's room, connecting with the cellars. On the other side was the Great Kitchen, about 24 ft. by 20 ft., with an enormous chimney opening, flanked by a baking oven and boilers, with a larder in connection. Beyond these offices another range of separate dwelling-houses stood, occupying the site of the Bailiff's house . . . between which, and the Great Hall, stood yet another kitchen."

In the north-west corner of the Great Hall is a bricked-up doorway which led to the Buttery, and the two columns in the Hall probably mark the position of the screens.

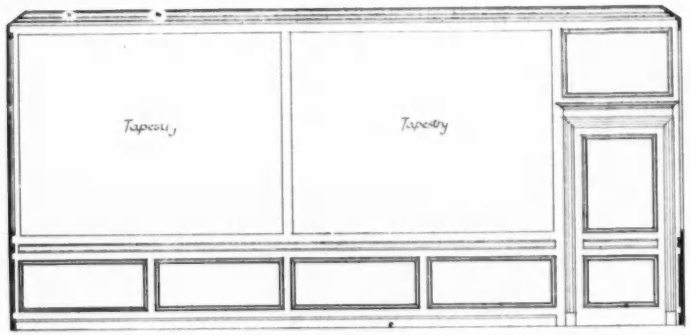
The staircase has been removed from another place, and set up in its present position. It is thought to have come from Montgomery Castle, but the account of materials removed from there does not mention it. This points to its having been in the original lodge, which would have had such a staircase. It is Elizabethan in character, with massive newels, the bases of which are cut with "jewel" ornament, heavy balusters, and coarsely-moulded strings and handrails, the mouldings of which are quite Gothic in form.



· LYMORE · HALL · MONTGOMERY ·

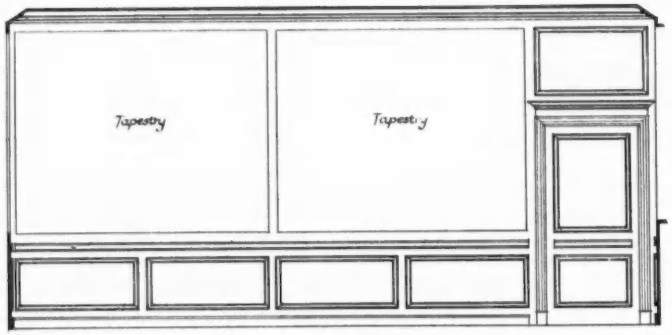


SOUTH · SIDE

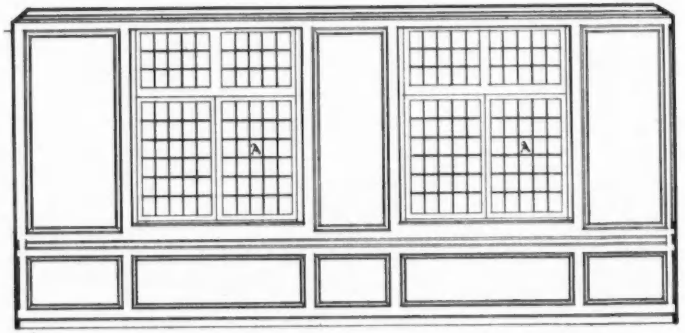


· WEST · SIDE ·

· Panelling · to · State · Bedroom ·



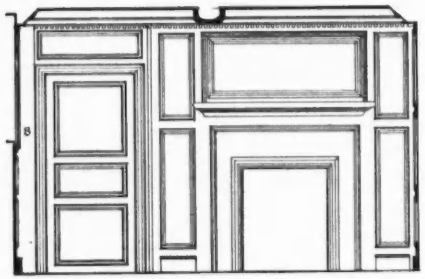
· NORTH · SIDE ·



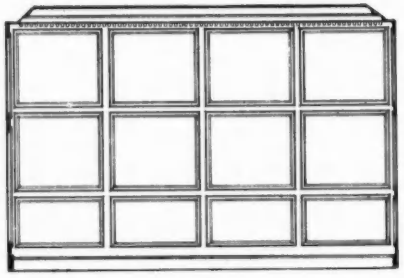
AA opening lights slide · to · left ·

EAST · SIDE ·

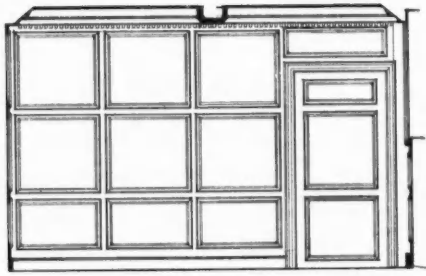
· Panelling · to · Garden · Room ·



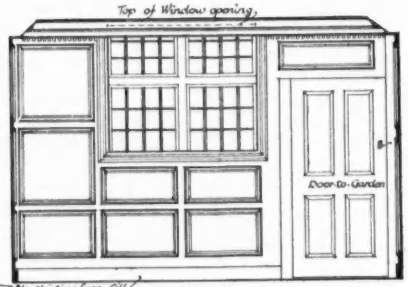
· SOUTH · SIDE



WEST SIDE



· NORTH · SIDE ·



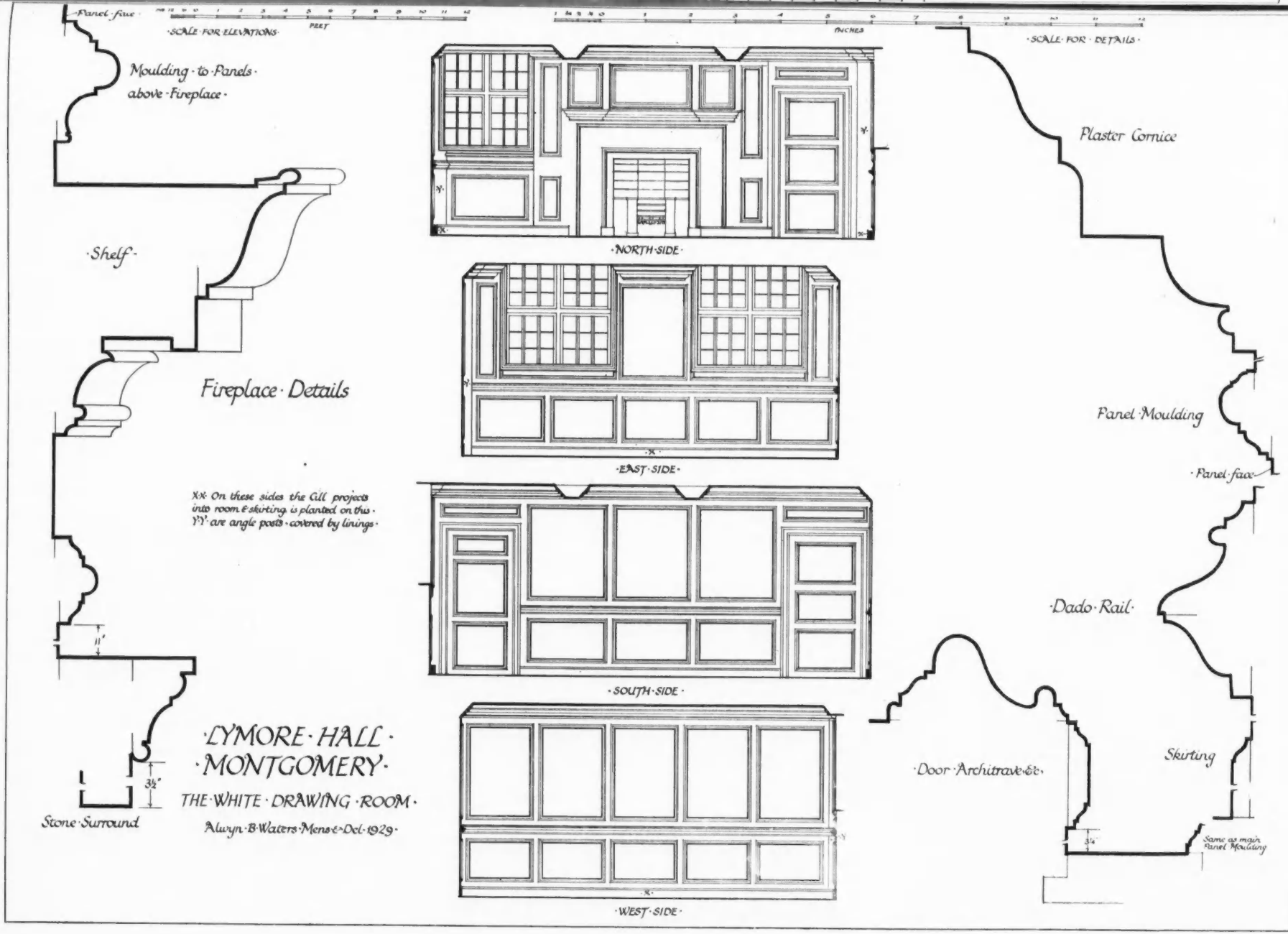
· EAST · SIDE ·

B-B · Splayed lining to cover angle post

· Alwyn B Watts · Mons 2nd Del · 1929 ·




SOUTH SIDE
WEST SIDE
NORTH SIDE
EAST SIDE
No skirting here. Sill projects into Room.
Alwyn B Waters Mens & Del. 1929.


SCALE FOR ELEVATIONS
SCALE FOR DETAILS
Moulding to Panels above Fireplace
Shelf
Fireplace Details
Plaster Cornice
Panel Moulding
Panel face
Dado Rail
Skirting
Door Architrave &c.
Same as main Panel Moulding
NORTH SIDE
EAST SIDE
SOUTH SIDE
WEST SIDE
XX On these sides the sill projects into room & skirting is planted on this
YY are angle posts covered by linings
Stone Surround
LYMORE HALL
MONTGOMERY
THE WHITE DRAWING ROOM
Alwyn B Waters Mens & Del. 1929

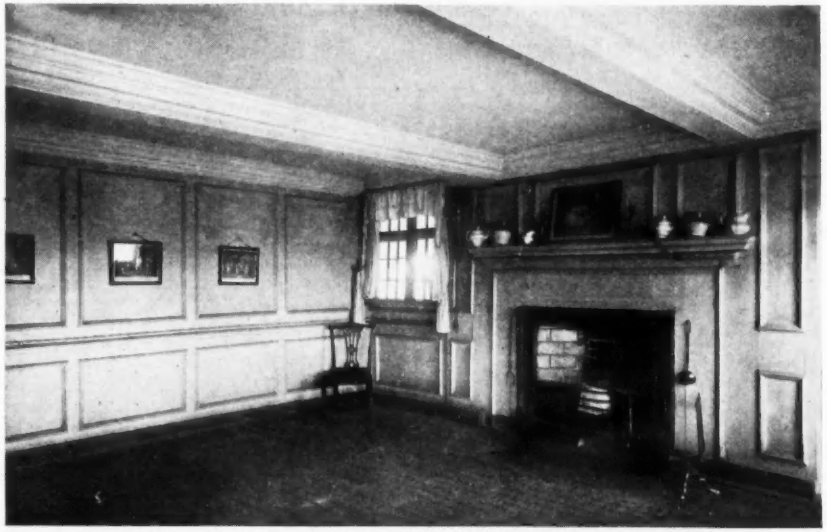






The east elevation and south end ; another view of the south end ; and the north elevation. The most interesting things in the house are the wrought-iron fittings : casement fasteners of many different patterns, ingenious door-latches, and well-designed strap hinges and bolts. The brass-cased locks are of somewhat later date, and are of extremely fine workmanship. The photograph of the north elevation should be compared with the early sketch on page 845, showing the original six gables.





Lymore Hall, Montgomery.]

The garden room ; and the white drawing-room. The panellings, although shown regular in the drawings reproduced on the preceding pages, are not actually so. The heights on the different sides of the rooms vary slightly, as though the panellings had been fitted after settlement had occurred. The main lines run through in spite of this.





Two views of the main façades. The building is situated in Cork, and replaces another upon the same site destroyed during the Irish political troubles. Externally the walls are of local limestone. Bon Accord granite is used to a height of 4 ft. 9 ins. from ground level.

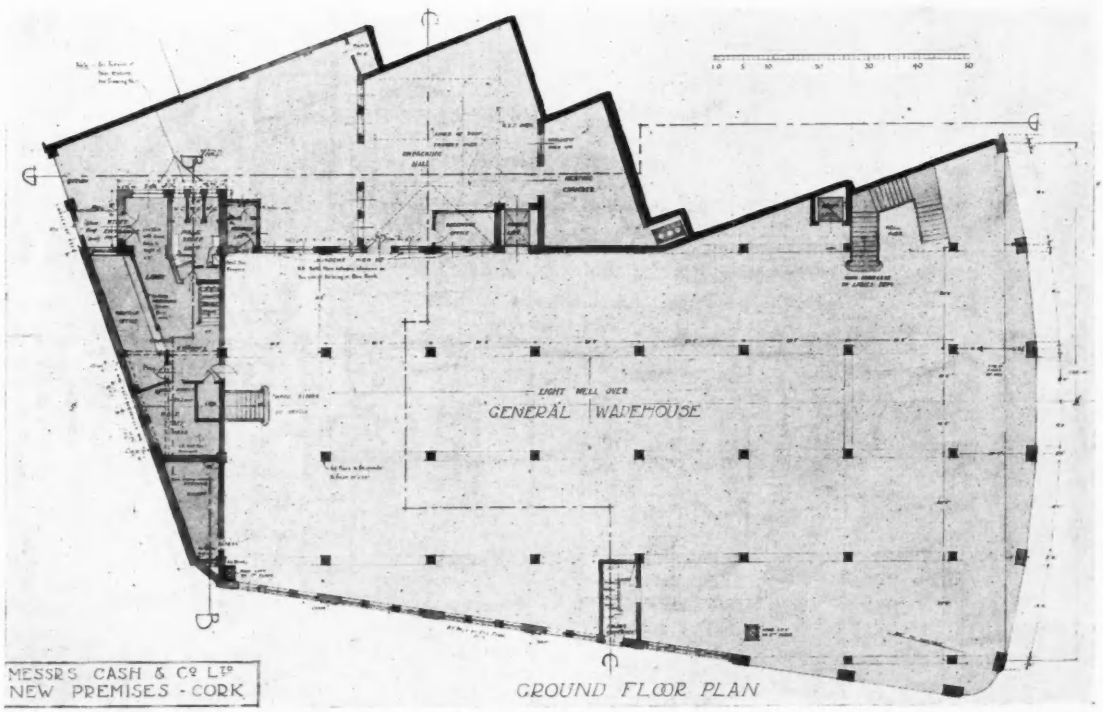
AN IRISH DRAPERY STORE

DESIGNED BY HENRY H. HILL

THE site of the new premises in Cork of Messrs. Cash & Co., Ltd., was an extremely awkward one. The original front building line was bent in two places, and in such a way that no coherent elevation could be raised upon it. By the sacrifice of some space to the public the new building line was made convex, on a radius of 210 ft.

Internally the building was laid out about a central axis normal to the curve, an arrangement which rendered the inconvenient angles as inconspicuous as possible; but it meant that into the irregularly shaped spaces had to be planned the staircases, staff cloakrooms, etc., a process involving much difficulty.

The columns were spaced 20 ft. 8 ins. from centre to centre in both directions, which seemed a convenient dimension for the laying out of the shop fittings. No steelwork is used in the external walls, except in the piers of the ground floor.

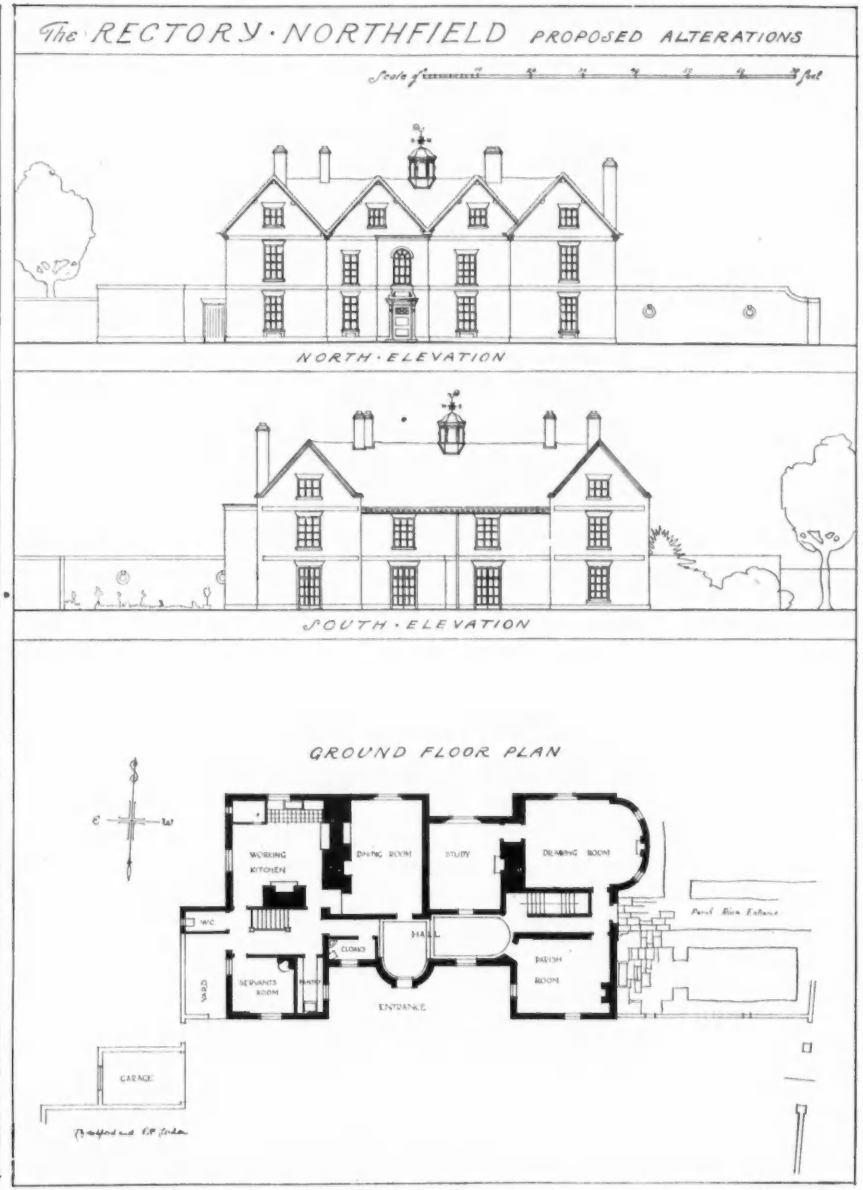


The ground-floor plan shows how the original building line, which was bent in two places, has been made convex in shape. In the elevational treatment of the building the horizontal lines have been emphasized as much as possible.

The garden room; and the white drawing-room. The panellings, although shown regular in the drawings reproduced on the preceding pages, are not actually so. The heights on the different sides of the rooms vary slightly, as though the panellings had been fitted after settlement had occurred. The main lines run through in spite of this.

Lymore Hall, Montgomery.]





The survey drawings of The Rectory, Northfield, and the scheme for reconditioning the building, made by the Birmingham Civic Society. From the report of the Society, a review of which appears on the facing page under the title "Stimulating Civic Pride."

LITERATURE

ARCHITECTURAL SHADOW PROJECTION

To some people the study of shadow projection has always been a pleasure, to others a labour, and to a minority a hidden mystery which, through slackness or lack of courage, they failed to grasp. To the latter there was always the fellow-student or the more youthful fellow-assistant to fall back upon for help.

The importance of the subject to all who study and practise architecture is evident, and, while to memorize the more intricate problems is unnecessary, the general principles should be easily mastered and easily retained.

A good lecturer can give the student the help he needs by being clear and concise and by eliminating irrelevant matter. A good book, given the same qualities, can be just as helpful, and to a far larger audience; moreover it is always available to refresh us.

Mr. Holmes has, I think, given us such a book. The binding and lettering upon it are delightful; the frontispiece is a rendered drawing by J. Brandon-Jones.

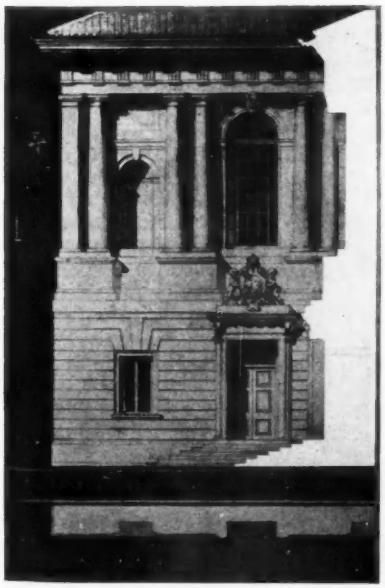
On reading further one is struck by the simplicity of it all; and this is a great tribute to the author. The necessary process of simplification and general cutting down in a work of this kind is usually difficult, and, unless skilfully carried out, can be misleading to the reader. In this instance the author has given us crisp phrasing without loss of meaning, a standard which can only have been reached through careful analysis. The explanatory diagrams are good, and are well reproduced.

The author begins his preface : " This book has for its aim the presentation in the simplest manner of the principles of architectural shadow projection "—a definition which he fulfils.

I would commend this work on the projection of shadows, first of all to the lazy or discouraged—they will find incentive ; secondly to those who laboured sadly — they will find encouragement ; and, thirdly, to those who already know the subject entirely I commend it because they may be wrong ; here are many short cuts worth knowing, as I found.

C. S. WHITE

Architectural Shadow Projection. By John M. Holmes. The Architectural Press. Price 10s. 6d. net.



An elevation with shadows : a drawing by J. Brandon-Jones. [*From* Architectural Shadow Projection.]

STIMULATING CIVIC PRIDE

Much evidence is given in the latest report of the Birmingham Civic Society of the practical way in which the Society are stimulating a wider concern for beauty among the citizens. During the year under review the Society turned their attention to such questions, vital in so far as the city is concerned, as the preservation of Aston Almshouses (still in abeyance), the establishment of art exhibitions in the branch museums, the presentation of a Watt pumping engine, dated 1767, to the Birmingham University Museum of Mechanics, and matters concerned with the preservation of the countryside. Designs were made for a fountain in Aston Park and for the layout of Chamberlain Gardens, Ladywood.

The Society have also given valuable help and advice with regard to the old Rectory at Northfield. In his dilapidations survey the diocesan surveyor reported unfavourably upon the building. A suggestion was therefore made to pull it down, sell off part of the site, and build a new and smaller rectory with the proceeds. The Church Council, however, were strongly opposed to any change other than reconditioning, and appealed to the Society to come to their assistance.

After a preliminary inspection it was agreed that a full survey should be made at the cost of the Society, with a view to ascertaining whether the present building could be so modified and adjusted as to satisfy present parochial needs, while preserving the interest and general amenity of the rectory and its neighbourhood. A survey was made accordingly, and subsequently a scheme of alterations, illustrated by courtesy of the Society on the facing page, was prepared and submitted to the rector, together with an approximate estimate of £2,500 for the work to be done. The matter is now in the hands of the Diocesan Dilapidations Committee.

This year the gold medal of the Society was presented to the Rt. Hon. Neville Chamberlain, M.P., in recognition of his great services to the social, intellectual and æsthetic life of the city.

R.

Report of the Birmingham Civic Society, September, 1928 — September, 1929. Price 1s. 6d. net.

The survey drawings of The Rectory, Northfield, and the scheme for reconditioning the building, made by the Birmingham Civic Society. From the report of the Society, a review of which appears on the facing page under the title " Stimulating Civic Pride."

THE " CUBIST " NORMAN

One of the most singular churches in Palermo described in Mr. J. Arnott Hamilton's scholarly monograph is S. John of the Lepers. This is the oldest church: it is situated not within the city itself, but in the suburb of Romagnolo, a mile away. It derives its name, says Mr. Hamilton, from a leper hospital which was afterwards established beside it, and it is said to have been built by the Normans when besieging Palermo.

Alterations were made in the church in Renaissance days, but an endeavour was made in 1925 to restore the interior to its original state. The Renaissance belfry on the west, however, still remains. The long nave and aisles are of Western plan, but the east end, with a dome covering a square space and with a triple apse, is Byzantine. The apses, however, are round externally and not polygonal, as is usually the



St. John of the Lepers. [*From* Churches in Palermo.]

case in Byzantine churches; and the dome is not tiled, but is plastered over to a smooth surface like an Arab dome. The illustration (page 851) shows how simple and massive the church is in its appearance.

In the words of Mr. Hamilton: "There is a strangely modern feeling about it; it might almost be a piece of cubist architecture."

Churches in Palermo. By J. Arnott Hamilton, M.A., B.D., PH.D. Twelve pages and four illustrations. B. T. Batsford, Ltd. Price 2s. net.

THE ESSEX, CAMBRIDGE, AND HERTFORDSHIRE SOCIETY OF ARCHITECTS

The Year Book of the Essex, Cambridge, and Hertfordshire Society of Architects has reached its second year of publication. Since the last issue the Council of the Essex Society of Architects have decided to invite their professional colleagues in the counties of Cambridge and Hertfordshire to co-operate in their work under the auspices of one united body allied to the R.I.B.A. At a special meeting of the society held at the R.I.B.A. on June 5, it was unanimously resolved that the title of the society should be changed forthwith to "The Essex, Cambridge, and Hertfordshire Society of Architects."

The Council have also decided to accept the offer of the Council of the R.I.B.A. to award a bronze medal for the best building erected during the year ending December 31, 1928. The award has been made, and the building is illustrated in this issue of THE ARCHITECTS' JOURNAL.

The 1929–1930 Year Book of the Essex, Cambridge, and Hertfordshire Society of Architects.



Commerce House, Bradford. Designed by W. J. Morley and Son. This building, which has been erected by the Bradford Chamber of Commerce, was opened by the Prince of Wales on November 13. The façade is of stone, and metal windows have been fitted. A council chamber has been provided on the first floor, with accommodation for three hundred persons. On the sixth floor is a flat for the caretaker. The remainder of the building is devoted to offices.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

In reply to Mr. Freeman, Mr. Lansbury, the First Commissioner of Works, stated that a detailed survey of Offa's Dyke was being conducted by a competent archæologist. Parts of the Dyke were already scheduled under the Ancient Monuments Act, and the remainder would be dealt with in due course.

Mr. Greenwood, Minister of Health, informed Mr. Bryce that the amount of the Exchequer contributions paid during the year ended March 31, 1929, and the number of houses in respect of which contributions were payable at that date under the various Housing Acts were:

	Amount of Exchequer contributions paid in the year ended 31st March, 1929.	Number of houses eligible for Exchequer contributions at 31st March, 1929.
1919 Act	£6,827,364	173,316
1923 Act	£1,976,897	381,972
1924 Act	£1,865,713	232,900
1926 Act	Nil	836
	£10,669,974	789,024

In addition, 7,953 houses had been completed under slum clearance schemes at March 31, 1929, with financial assistance under the 1919 and 1923 Acts. Exchequer contributions in respect of these were included in the figures given above.

Mr. Mathers asked the First Commissioner of Works whether representations had been made to him regarding the buildings to be erected upon the site of the Calton jail, Edinburgh; if he was prepared, while there was yet time, to put the design of the proposed new buildings out to open competition; and, failing his consent to this, was he prepared to secure amenity by adhering to the features of the present buildings and making only partial alterations instead of going in for total demolition.

Mr. Lansbury replied that the answer to the first part of the question was in the affirmative, and to the second part in the negative. After careful inquiry he had come to the conclusion that the existing building could not be adapted to any practical use, but the amenities would be secured by the submission of the designs of the new building for consideration and advice to the Royal Fine Art Commission for Scotland and thereafter to the Corporation of the City of Edinburgh.

Mr. Remer asked the Postmaster-General if he could make any statement as to his efforts to make the post offices in this country more picturesque; and what it was estimated will be the cost in the present financial year.

Mr. Lees-Smith replied that proposals for improving the existing conditions in the greater number of the Crown Offices were being investigated, and the actual work involved in carrying out the various recommendations would be put into operation as soon as practicable. The estimated cost involved during the present financial year was about £45,000.

Asked as to the expenditure on the proposed Haig statue, Mr. Lansbury said that the expenditure to date had been £460, which was almost entirely made up of the fees paid to the sculptors who were asked to submit designs. In addition, the Office of Works had agreed to pay the sculptor whose design was selected, £500 for preparing a larger model, modifying his original design as recommended by the Assessors. This would not be ready for some months.

Mr. Greenwood informed Sir R. Gower that the number of buildings of various kinds (including houses, shops, stores, warehouses, etc.) which had been acquired by local authorities during the last three years in connection with approved slum clearance schemes was approximately 6,700.

Sir K. Vaughan-Morgan asked the Minister of Health whether his attention had been drawn to the schemes for the re-conditioning of dilapidated property which were being carried out successfully by private enterprise ; and whether he was prepared to extend the powers which local authorities possessed to co-operate financially and otherwise with private enterprise in schemes of re-conditioning and slum-clearance over large areas.

Mr. Greenwood said that the reply to the first part of the question was in the affirmative. As regarded the second part, he would carefully consider this, as well as the other aspects of the problem of slum clearance. He could not anticipate the proposals which he hoped to submit to the House.

Captain Hudson asked the Minister of Health whether he was aware that certain recreation grounds, playgrounds and open spaces in London were being closed in order that local authorities might utilize the sites for building purposes; and whether, in view of the increasing need for such open spaces in towns and cities, he could take any steps to deal with this matter.

Mr. Greenwood said he was not at present aware of any case where in London a public recreation ground, playground or open space had been closed for building. If Captain Hudson would give him particulars, he would be glad to make inquiries.

Mr. S. Sanders, P.A.S.I., chartered quantity surveyor, is now practising at 257–9 Oxford Street, W.1. Telephone No.: Grosvenor 1178.

SOCIETIES AND INSTITUTIONS

R.I.B.A. KALENDAR

The R.I.B.A. Kalendar, 1929-1930, has just been issued by the Royal Institute. Copies may be obtained from the Secretary, 9 Conduit Street, W. 1. Price 3s. 9d. net.

NATIONAL HOUSING AND TOWN PLANNING CONFERENCE

A national housing and town planning conference will be held at the Palace Hotel, Buxton, during the week-end November 29 to December 2, under the auspices of the National Housing and Town Planning Council. The conference will be opened by the Mayor of Buxton.

Special consideration will be given to the problem of the slum, and recommendations will be put forward for the gradation of rents to meet the needs of poor large families. Other subjects for discussion will include the administration of the Housing (Financial Provisions) Act, 1924, rural housing, the need for fresh town planning legislation, the preservation of the countryside, and the case for the decentralization of industry.

Full particulars can be obtained from Mr. John G. Martin, Secretary, National Housing and Town Planning Council, 41 Russell Square, London, W.C. 1.

THE C.P.R.E. EXHIBITIONS

The C.P.R.E. "Save the Countryside" exhibitions, which have been in existence for a year, are now under the control of the Exhibition Committee of the C.P.R.E., of which Mr. H. H. Peach is the hon. secretary.

The exhibitions consist of a large collection of photographs, illustrating not only the hideous disfigurements of reckless advertising, "ribbon development" in building, and blatant petrol-filling stations, but also examples of good modern buildings, well-designed and orderly garages, and the proper incorporation of natural beauties in necessary housing schemes.

Owing to the great demand, four regular exhibitions have been formed to meet different requirements, as follows: (*a*) which is about 240 ft. long when hung; (*b*) about 170 ft. long when hung; (*c*) about 70 ft. long when hung; and (*d*) about 36 ft. long when hung.

Application for the use of the exhibitions should be made to the Hon. Secretary of the Exhibitions Committee, 42 St. Nicholas Street, Leicester.

MODERNISM IN FURNITURE

A lecture on "Modernism in Furniture" was delivered by Mr. Holbrook Jackson at a meeting of the Yorkshire Society of Architects, held at Leeds. Mr. G. H. Foggitt presided.

The lecturer said that what was known as the Modernist movement in art was the result of social rather than of æsthetic changes. There had been a social impulse behind most art movements, a number of which, including the present one, had been frank protests against an existing art condition. The vogue inaugurated by Ruskin and Morris led to many artistic improprieties, and was the means of turning the comfortable nineteenth century dining-rooms of the plutocracy into fourteenth century refectories, and their Victorian lobbies into romantic crypts. The Modernist view of furniture was frankly utilitarian.

Mr. W. Alban Jones, in proposing a vote of thanks to the lecturer, declared that it was time that somebody started a campaign against Modernism as being all nonsense. Art only began where function and logic ended. He did not feel that the Modernists were on the right rails, and the movement was nothing but a puritanical protest against over-ornamentation. It did not seem to him to express any conceivable or describable emotion.

THE DORIC ORDER

Sir Banister Fletcher, P.R.I.B.A., lecturing at the Central School of Arts and Crafts last Wednesday on the Origin and Evolution of the Doric Order of Greek Architecture, said that the Dorian Greeks invented the Doric Order and developed it to a high degree of refinement. With modifications, the Order had been used by the Romans, and by Medieval, Renaissance, and Modern architects, as, for example, in the entrance portico to Euston Station.

He said the temple ruins of the Heraion at Olympia, dating back to 700 B.C., and at Pæstum, Selinus, Corinth, and Athens, showed the use of the Order in its sturdiest form through various stages of development to the great refinement achieved when Greece was at the zenith of her power and prosperity.

Sir Banister discussed various theories as to the origin of the Doric Order, whether it was from a lithic or a wooden prototype. He asked: Did it originate from the Egyptian rock-cut tombs of Beni-Hasan or from the wooden hut with posts supporting beams? All we knew was that certain forms suited to the ideas and needs of the Greeks were used in combination, resulting in a perfection of form which was still recognized as a thing of beauty.

Most interesting restoration works were shown, including the famous Temple of Zeus at Olympia. This contained the marvellous chryselephantine statue of Zeus by Pheidias, which was regarded by the ancients as one of the seven wonders of the world.

WELSH SCHOOL OF ARCHITECTURE

The students of the Welsh School of Architecture designed and carried out a remarkably effective scheme of decoration and lighting for the Assembly Hall, Technical College, Cardiff, in which a dance was held by the School of Architecture Club. This decorative scheme, in black and orange, with the use of flood lighting, added considerably to the pleasure of the function.

Among those present were Messrs. C. J. Bartlett, H. J. Hughes, J. W. Bishop, C. Thatcher, J. P. Ward and W. S. Purchon, M.A., A.R.I.B.A.

TRADE NOTES

On the stand of Messrs. Ruston and Hornsby, Ltd., at the Public Works, Roads and Transport Exhibition, held at the Agricultural Hall, London, from November 18 to 23, were shown some attractive exhibits, including the now well-known "Ruston" No. 4 petrol-paraffin engine-driven universal excavator. At the previous exhibition this machine was equipped as a shovel, with ½ cu. yd. bucket; on the present occasion it was exhibited with back-acting trencher equipment. The increasing use of crude oil as a fuel for road rollers is reflected in the appearance of two models of up-to-date road rollers. As may be expected, in view of the firm's large oil-engine experience, the power units embody the latest features in oil-engine design.

A useful drawing office requisite is being distributed among architects by the Merchant Trading Company, Ltd. It takes the form of a small sample of Celotex, to which are attached a number of drawing pins. On the head of each drawing pin, printed on a white background, are the words "Specify Celotex in all Buildings."

The Stanton Ironworks Company, Limited, near Nottingham, have decided to put down a further works for the manufacture of their de Lavaud spun iron pipes. The present works have been operating for some years past at an output of about twenty-five miles of spun iron pipes per week. They have proved insufficient for the requirements of the market, and the new works are being laid down for an additional output of fifteen miles per week. The pipes in these new works will be made eighteen feet long, from four inches diameter upwards, in place of twelve feet long, for which the present works are designed.

In our issue for October 23 we illustrated a house at Westcott, near Dorking, designed by Mr. Arthur J. Stedman, F.R.I.B.A. We learn that the front entrance, as shown upon the ground-floor plan, illustrated on page 623, is between the butler's pantry and the lavatory and cloaks. The entrance to hall between the dining-room and drawing-room is the garden entrance.

COMPETITION CALENDAR

December 7. The Provost, Magistrates, and Councillors of Dumfries invite architects practising in Great Britain to submit competitive designs for the Town Hall and Municipal Offices, which it is proposed to erect on the site of the old Town Hall and of the Municipal Offices. Dumfries. Assessor: Sir George Washington Browne, P.R.S.A. Premiums: £300, £200, and £100. Application for conditions of competition, etc., should be made to R. A. Grierson, Town Clerk, Town Hall, Dumfries. Deposit £2 2s. Latest date for sending in designs: December 7.

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

THE BUILDINGS ILLUSTRATED

Following is a list of the specialists, general contractors, and some of the sub-contractors for the buildings illustrated in this issue :—

The "Rose and Crown" public-house (pages 831–834). H. J. Venning, quantity surveyor. George K. Gray, design for badge as trade mark. Laurence A. Turner, carving. General contractor, William Sindall. Sub-contractors: Doulton & Co., Ltd., glazed and coloured earthenware for trade mark; John Saunders and Son, Luton facing bricks; Colliers, Reading, pantiles; Stirling and Johnson, Ltd., roofing; Pilkington Bros., Ltd., glass; Thomas Elsley, Ltd., cast-iron rainwater heads and door and window furniture; Bratt Colbran & Co., grates and oak mantel in bar parlour; National Radiator Co., heating range; Shanks & Co., Ltd., sanitary fittings; F. Chubb and Son, casements; W. Hitchins & Co., Ltd., bar counter fronts and doors; Haywards, Ltd., pavement lights; Walter Macfarlane & Co., ventilation in ceiling of club-room; Drytone, Ltd., furniture; Swire & Co., seating in smoking-room; Gaskell and Chambers (London), Ltd., bar and cellar fitting; Nash and Hull, Ltd., sign and lettering; Mander Bros., Ltd., paint; Ancaster stone.

Ambron House, Vauxhall Bridge Road (pages 835–839). W. Mabey, stone carving. General contractors, John Greenwood. Sub-contractors: Lindsays Paddington Ironworks, Ltd., constructional steelwork; Caxton Floors, Ltd., floors; Ragusa Asphalte Paving Co., Ltd., asphalting; Brookes, Ltd., granite work; Mather and Platt, Ltd., sprinklers; Crittall Manufacturing Co., Ltd., metal sashes; Luxfer, Ltd., oriel window and pavement lights; Express Lift Co., Ltd., lifts; E. Pollard & Co., Ltd., fire-resisting shutters; A. Jones Lock Co., ironmongery; Morris Singer Co., balustrading, bronze and wrought-iron grilles, etc., and leaded glazing; Art Marbles, Stone and Mosaic Co., Ltd., marble work and patent pavings; W. N. Froy and Sons, Ltd., sanitary fittings; Artistic Blind Co., blinds. Douglas Street extension: Haywards, Ltd., roller shutters; F. A. Norris & Co., roller shutter to fire lobby openings; Mellowes & Co., Ltd., roof glazing.

Cash's shop, Cork (page 849). Architect: Henry H. Hill, B.A., A.R.I.B.A. General contractors, John Sish and Son. Sub-contractors: Redpath, Brown & Co., Ltd., structural steel; Mellowes & Co., Ltd., patent glazing; M. Barry, Ltd., central heating and plumbing; F. C. Porte & Co., electric wiring; Williams, Gamon & Co., Ltd., casements; John Buckley and Sons, wrought-iron work and metalwork; E. Pollard & Co., Ltd., and John Sish and Son, shop fittings; R. A. Evans, Ltd., electric goods lift.

Pudlo brand waterproofer, the product of Messrs. Kerner-Greenwood & Co., Ltd., was used in the reinforced concrete retaining walls to the basement of Arkwright House, Manchester, illustrated in our last issue. This basement goes down twenty-five feet below street level. We understand that the architect, Harry S. Fairhurst, A.R.I.B.A., also made use of this waterproofing material in the construction of the deep basement to the head offices of the Bleachers' Association in Manchester, and for the basement to the *Manchester Guardian* Offices, an illustration of which appears on page xxv this week.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

33824. Dunz, C. E., and Eureka, Ges. für Leichtbau und Isolierplatten. Production of building material. November 6.

33825. Fife, C. W., and Sea Sports, Ltd. Reinforced concrete structures. November 6.

33469. Glasfabriek Leerdam voorheen Jeekel Mijnssen & Co. Glass box-shaped building elements. November 4.

33534. Junkers, H. Structural members for building walls. November 4.

33910. Liebold, H. C. Device for production of bases of columns from concrete, etc. November 7.

SPECIFICATION PUBLISHED

321325. Tetlow, C. E. Ceilings, walls, floors, roofs, and like structures.

ABSTRACT PUBLISHED

319416. Dessau, M. M., and Flores, S. L. Rubber floor covering, etc., material.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The WANDSWORTH B.C. is to erect houses on a site in Fountain Road.

Shell-Mex, Ltd., are to reconstruct their premises in FULHAM, at a cost of £33,000.

Messrs. Hobden and Porri, architects, have prepared plans for the STOKE NEWINGTON B.C. for the erection of a substation.

The WOODFORD U.D.C. has passed plans for the construction of roads and sewers on the Salway Hall estate, which is now being developed.

The SHOREDITCH B.C. is to prepare a reconstruction scheme for the Drysdale Street area, comprising about 1½ acres of land.

The L.C.C. is to proceed with the completion of the development of the BECONTREE estate by the erection of 1,414 houses, at a cost of £698,000.

The CROYDON Corporation has passed plans for the erection of twenty-two houses on land in Kensington Road, at an estimated cost of £8,720.

The Croydon Corporation is to purchase sixty acres of land, partly fronting Wickham Road, SHIRLEY, for a housing scheme.

The STEPNEY B.C. is to erect five blocks of dwellings, to rehouse persons on the Limehouse Fields improvement scheme.

The BERMONDSEY B.C. is to borrow £3,380 for the purchase of a site in Grange Road, for a housing scheme.

The WANDSWORTH B.C. is purchasing property required in connection with the scheme for the erection of new municipal buildings, for the sum of £7,500.

The BERMONDSEY B.C. Housing Committee has approved the scheme for the erection of eighty-four flats at Acorn Yard, Rotherhithe Street, at a cost of £83,000.

The L.C.C. is to develop the northern section of the St. Helier estate, MORDEN, at a cost of £336,000. Provision has been made for the erection of 948 houses.

In connection with the erection of the new wing at the County Hall, WESTMINSTER, the L.C.C. proposes to proceed with the extension of the river wall, at a cost of £34,000.

The L.C.C. has approved plans submitted by Mr. D. Mislin, managing director of the Globe Cinema, Ltd., for the reconstruction of the cinema in Northcote Road, BATTERSEA.

The Essex Education Committee has acquired about 6½ acres of land at Parsloes Avenue, DAGENHAM, for the purpose of providing secondary school accommodation for the Dagenham area.

It was stated at a meeting of the L.C.C. that the scheme for the construction of a new road to VICTORIA DOCKS would probably be commenced in January.

The Croydon Corporation is in negotiation with the Ecclesiastical Commissioners for the purchase of forty-four acres of land at WADDON, for housing purposes.

In connection with the proposed new baths at CLAPHAM, the Wandsworth B.C. has instructed the borough engineer to prepare an elevation, plans, specification and estimates of cost.

The Essex Education Committee has purchased a site of six acres of land at Longbridge Road, BARKING, for the purpose of providing technical school accommodation for the Barking, Ilford and Romford districts.

The trustees of the Order of Dominican Nuns have acquired Orange Hill House and three acres of land on the Watling Estate, HENDON, for the accommodation of Sisters and for the subsequent erection of a secondary school.

The SHOREDITCH B.C. has asked the Health Committee to prepare a scheme for the erection of a new dental hospital and offices, for the Public Health and Maternity and Child Welfare Departments at Laburnum Street.

The Westminster Diocese Trustees, who have acquired a site in Thirleby Road, on the Watling Estate, HENDON, for the erection of a Roman Catholic church and school, have now acquired further land for the provision of a parochial hall and an elementary school.

Plans passed at TOOTING: Extensions, substation, Broadwater Road, for County of London Electric Supply Co., Ltd.; garages and flats, Tooting Bec Gardens, for Messrs. H. D. Harding, Ltd.; alterations and additions, 149-155 Mitcham Road, for Messrs. Myall Bros.

Plans passed by the WANDSWORTH B.C.: Thirty-six flats, Esparto Street, Springfield, for Messrs. J. Lovell and Son; workshop, 87 Pentney Road, for Mr. A. Moore; four houses, Coombe-martin Road, for Messrs. E. Clarke and Sons; two shops, Spencer Road, Putney, for Mr. G. Brown; pavilion, Clarence Road, Clapham, for Messrs. W. T. Cayzer and Son.

Plans passed by the CROYDON Corporation: Alterations and additions, 19-21 George Street, for Messrs. John Barker & Co.; garages and stores, Coombe Lane, for Mr. H. Macintosh; two houses, Woodlands Way, for Mr. F. Merredew; two houses, Hartland Way, for Mr. K. A. Hooper; factory, off Purley Way, for Messrs. A. G. Macdonald and W. Allison; two houses, Warminster Road, for Messrs. Castle Bros., Ltd.; alterations and additions, 39-47 North End, for Messrs. Batchelar and Son, Ltd.; two houses, Hurst Road, for Mr. L. H. Harrington; shop, North End, for Messrs. Davis and Emanuel and Smart; alterations and additions, 79 South End, for Messrs. Whinney, Son and Austen Hall; six houses, Berne Road, for Mr. T. Joyce; showroom and garages, 145 London Road, for Smith's Auto-Mart, Ltd.; addition to mission hall, Mersham Road, for Messrs. H. Hemmings, Ltd.; three houses, Brighton Road, for Mr. P. Richard, son; showroom and workshops, 10 Woden Grove, for Mr. C. Lewin; shop, Ecclesbourne and Zermat Roads, for Messrs. Smith Wilkinson, Ltd.; two houses, Eldon Avenue, for Messrs. Paish, Tyler and Crump; additions, Mission Hall, Portland Road, for Messrs. Parr and Sons; alterations and additions, "Queen's Head" public-house, Princess Road, for Mr. C. R. Riches; alterations and additions, 781 London Road, for Mr. H. E. Hart; twelve houses, Wharncliffe Road and Gardens, and twenty-four houses, Falkland Park Avenue, for Mr. P. Richardson.

SOUTHERN COUNTIES

The BEXHILL borough surveyor has prepared plans for the erection of twelve houses in Alexandra Road.

The Kent Education Committee is to erect new buildings for the Grammar School for Girls at MAIDSTONE.

The Kent Education Committee is to adapt the County School for Girls at DOVER as a boys' school.

On behalf of the First Church of Christ Scientist, Messrs. Davidson, Son and Sherwood have prepared plans for the erection of a church in Cantelupe Street, BEXHILL.

The Kent Education Committee has purchased sites at SITTINGBOURNE for the erection of two elementary schools, and is to proceed with the erection of an elementary school at WEST WICKHAM.

The SWANSCOMBE U.D.C. is to interview the chief engineer of the Southern Railway Company, with reference to the proposed widening of the bridge at Galley Hill, and the suggested removal of the station from Craylands to the more central position at High Street.

Plans passed by the BEXHILL Corporation: Ten houses, Haddocks Hill, for Mr. E. Bunce; two houses, Cooden Drive, for Messrs. Tubbs and Messer; six bungalows, The Byeway, for Mr. G. E. Matthews; bungalow, Pebsham, for Mr. L. Tanner; house, Richmond Road, for Messrs. Stevens and Sons.

EASTERN COUNTIES

The ESSEX C.C. has under consideration a proposal for the erection of a new mental hospital.

Plans have been submitted to the ROMFORD U.D.C., for the development of the Lodge Farm estate.

The Soke of PETERBOROUGH County Council is to erect bridges over the River Nene and the London and North Eastern Railway crossing.

A resolution has been adopted by the ESSEX County Council recommending that a Bill should be promoted in Parliament this session, authorizing the Essex and Kent County Councils to construct a tunnel under the Thames between Dartford and Purfleet for vehicular and pedestrian traffic. The cost is estimated at £3,000,000.

MIDLAND COUNTIES

The managers of the school at SOUTHWELL, Notts, are to carry out alterations to the existing school, and to erect a new block for senior scholars.

The Notts Education Committee has obtained a site at KIMBERLEY, for the erection of an elementary school.

The Notts C.C. is to erect a new bridge over the level crossing at Lincoln Road, NEWARK, at a cost of £35,000.

The LEICESTER Education Committee has obtained a site in Imperial Avenue, for the erection of a public elementary school.

The LEICESTER Corporation is to erect a further 250 houses on the Braunstone estate, at a cost of £110,000.

The LEICESTER Education Committee has selected a site on the Braunstone estate, for the proposed new buildings of the Newarke secondary school.

The Notts Education Committee is seeking sanction to borrow £26,000, in connection with the new premises of the Queen Elizabeth Grammar School and the Brunts School, MANSFIELD.

The Notts Education Committee is seeking sanction to borrow £45,500, for the erection of an elementary school at Lenton Abbey Estate, BEESTON.

The Notts Education Committee reports that the Board of Education has approved preliminary plans for the new building of the County School of Art, MANSFIELD. The estimated cost is £8,000.

The LEICESTER Corporation has agreed to the plans prepared by Messrs. Stockdale Harrison and Sons and George Nott, for the new Education Offices in Newarke Street, and has accepted the tender of Messrs. Bowles and Son, £14,760, for the erection of the buildings.

The LEICESTER Corporation has prepared a scheme for the abolition of the Saffron Lane level crossing, and for the construction of a new road from the junction of Aylestone Road and Saffron Lane, and also for the widening of a portion of Saffron Lane to Cavendish Road as a scheme for the relief of unemployment. The estimated cost is £84,360.

The LEICESTER Corporation has selected a site on the Western Boulevard for the erection of baths. The city surveyor has prepared a preliminary sketch scheme, which provides for the erection of two full-sized swimming pools and provision for a bath manager's residence and a turkish bath establishment. The estimated costs are £57,000 for swimming baths, and £3,000 for turkish baths.

NORTHERN COUNTIES

Plans for rebuilding the Palladium, the SOUTHPORT picture theatre which was burnt down in March, have been approved.

The North Riding Education Committee has decided to make provision for the erection of a secondary school at ESTON.

The BIRKENHEAD Education Committee is to acquire a site for school purposes in Alpha Drive, Rock Ferry.

The Lancashire C.C. is seeking sanction to borrow £130,000, for the extension of the county offices at PRESTON.

The Lancashire Education Committee is seeking sanction for a loan of £34,000, for the erection of a secondary school for the DROYLSDEN district.

The Lancashire Education Committee has acquired a site at LOWTON, for the erection of an elementary school.

Plans have been approved by the Lancashire Education Committee for the erection of a training college at ORMSKIRK, at a total cost of £200,000. Provision is to be made for an education block, four hostels and other accommodation.

The YORK Corporation has prepared a scheme for the construction of a by-pass or ring road between Dringhouses and the Malton Road, which would connect eight important roads radiating from the city. The total cost is estimated at £259,000.

Plans passed by the MANCHESTER Corporation: Alterations, Café Royal, Peter Street and Bootle Street; recreation room on roof of premises, West Mosley Street and Marble Street; alterations and additions, "Princess Inn," 607 Rochdale Road, Collyhurst; three shops, Bellott Street, Cheetham; sports pavilion, off Victoria Avenue, Blackley; market hall and four shops, Barlow Moor Road, Choriton-cum-Hardy; seventeen houses, Kingsway and Homestead Crescent, Didsbury; sixty houses, Kingswood Road, Wold Avenue, Hove Drive and Santon Avenue, Withington; alterations and additions, "Crown and Kettle," Great Ancoats Street and Oldham Street; three houses and three shops, Worsley Avenue, Moston; eight shops and houses, Blue Bell Avenue and Tyndall Avenue, Moston; dairy and offices, Nether Street, Ardwick; additions, "Langham Hotel," Radnor Street and Bristol Street, Hulme; office and twenty-five lock-up garages, Lansdowne Road, West Didsbury.

MISCELLANEOUS

The CAPE TOWN Corporation has prepared a scheme for the provision of an air port, at a cost of £60,000.

The CAPE TOWN Corporation Housing Committee is to invite tenders for the erection of further houses under the Devil's Peak housing scheme.

Messrs. Murray and Stewart are to erect a six-story building at the corner of Cheviot Place, High Level and Wigtown Roads, Green Point, CAPE TOWN, comprising forty flats, eighteen garages and staff quarters.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury..	S. Counties	1 4	1 0
B_2	BANBURY..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead ..	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood ..	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_2	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teesside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 10 0
Pit gravel, per yd.	0 15 0
Pit sand, per yd.	0 12 6
Washed sand, per yd.	0 13 0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2 8 0
Lias lime, per ton	2 0 0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1 3 0	*Trailer*	£0 15 0
3-ton motor lorry	3 15 0	*Steam roller*	4 5 0
Steam lorry, 5-ton	4 0 0	*Water cart*	1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0 1 6
SPREAD and level, including wheeling, per yd.	0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0 10 6
TRIMMING earth to slopes, per yd. sup.	0 0 6
HACKING up old grano. or similar paving, per yd. sup.	0 1 3
PLANKING to excavations, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.	
IF left in, add to above prices, per ft. cube	0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0 2 1
DO. 6 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube	2 3 0
DO. 6-2-1, per yd. cube	1 18 0
DO. in upper floors, add 15 per cent.	
DO. in reinforced-concrete work, add 20 per cent.	
DO. in underpinning, add 60 per cent.	
LIAS-LIME CONCRETE, per yd. cube	£1 16 0
BREEZE CONCRETE, per yd. cube	1 7 0
DO. in lintels, etc., per ft. cube	0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0 3 9
FINE concrete benching to bottom of manholes, per ft. cube	0 3 0
FINISHING surface of concrete spade face, per yd. sup.	0 0 9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0 0 10
DO. *6 in., per ft.*	0 1 3
DO. *9 in., per ft.*	0 2 3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 5 6
DO. *6 in., per yd.*	0 8 0
Portland cement and sand, see "Excavator" above.	
Leadwool, per cwt.	£2 0 0
Gaskin, per lb.	0 0 4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4 5 6
Flettons, per M.	2 12 6
White facing bricks, per M.	5 0 0
Multi-coloured facings, per M.	7 7 9
Best red facings, per M.	7 7 9
Rubbers, 9½ in., per M.	12 0 6
Staffordshire blue, per M.	9 5 0
Firebricks, 2½ in., per M.	9 5 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. *headers, per M.*	20 10 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	
Lime, grey stone, per ton	£2 11 6
Mixed lime mortar, per yd.	1 6 0
Dampcourse, in rolls of 4½ in., per roll	0 2 6
DO. *9 in. per roll*	0 4 9
DO. *14 in. per roll*	0 7 6
DO. *18 in. per roll*	0 9 6

BRICKWORK in stone lime mortar, Flettons or equal, per rod 32 0 0
DO. in cement do., per rod 34 10 0
DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0 1 0
BEDDING plates in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING do. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
DO. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
DO. picked stocks, per ft. sup. extra	0 0 7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side, per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in., per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around gullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 9
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 11 0
York templates sawn, per ft. cube	0 7 6
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	

HOISTING and setting stone, per ft. cube £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup.	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do., per ft. run	0 1 4
HALF SAWING, per ft. sup.	0 1 0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	£0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 7 6
YORK SILLS, W. & T., ft. cub. fixed	1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0 1 3
DO. 2½ in. thick, per ft. sup.	0 1 6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:	
Portmadoc Ladies	£14 0 0
Countess	23 0 0
Duchess	32 10 0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8 3 9
Grey-green do., per ton	7 3 9
Green peggies, 12 in. to 8 in. long, per ton	5 13 9
In 4-ton truck loads, delivered Nine Elms station.	
Clips, lead, per lb.	£0 0 6
Clips, copper, per lb.	0 2 0
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 2 2
Cement and sand, see "Excavator," etc., above.	
Hand-made tiles, per M	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
DO. *Peggies, per ton*	7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0

WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6 7 0
Grey-green do.	5 9 0
Green peggies, 12 in. to 8 in. long	4 13 6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3 17 6
DO., machine-made do., per square	3 7 6
Vertical Tiling, including pointing, add	18s. 0d. per square.
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard Scandinavian, etc. (equal to 2nds):	
7 × 3, per std.	£22 0 0
11 × 4, per std.	30 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 4 6
DO. *T. and G., 1 in., per sq.*	1 4 6
Planed boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 1 6
Mahogany, Honduras, per ft. sup. of 1 in.	0 1 4
DO. *Cuba, per ft. sup. of 1 in.*	0 2 6
DO., *African, per ft. sup.*	0 1 3
Teak, per ft. sup. of 1 in.	0 1 2
DO., *ft. cube*	0 14 0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 4 6
DO. framed in floors, roofs, etc., per ft. cube	0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube	0 8 6
PITCH PINE, add 33⅓ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO., 3-ply, per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0 0 4½
DO. 9 in. wide and over per ft. sup.	0 1 2

[continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1½ in. thick, per yd. sup.	0	12	0
Maple 1½ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1⅛ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1⅛ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1⅛ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1⅛ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1⅛ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1⅛ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. 4 *in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. 3 *in., per yd.*	0	1	8
DO. 4 *in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. 4 *in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. 4 *ft. sup.* ,,	0	2	3
DO. 6 *ft. sup.* ,,	0	2	6
DO. 20 *ft. sup.* ,,	0	3	1
DO. 45 *ft. sup.* ,,	0	3	3
DO. 65 *ft. sup.* ,,	0	3	5
DO. 100 *ft. sup.* ,,	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. ¼ *in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	17	0
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	3
Liquid driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	16	0
DO., *flat, per gall.*	0	16	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ⅜ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			⅝ in.			¾ in.		
Qualities ..	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	2½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 9	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, DECEMBER 4

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Some Architectural Poisons Abroad." By A. Trystan Edwards.

INSTITUTION OF STRUCTURAL ENGINEERS. Lancashire and Cheshire Branch. At the College of Technology, Manchester. Third Ordinary Meeting. Discussion on (i) "Reinforced Concrete Joints and Connections," to be opened by G. P. Bridges A.M.INST.C.E. (ii) "Welding as a Method of Jointing Structures," to be opened by P. L. Roberts, A.M.C.T., M.I.WELD.E. **7 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Advertiser and the Disfigurement of Town and Countryside: Criticisms and Suggestions." By H. H. Peach. Sir Lawrence Weaver, K.B.E., will preside. **8 p.m.**

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Modern Design and Decoration." By Howard Robertson, F.R.I.B.A., S.A.D.G. (Lantern illustrations.) **7 p.m.**

CITY ART GALLERY, MANCHESTER. Exhibition of photographs of modern commercial architecture. Until December 31.

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Exhibition of photographs of buildings visited on the A.A. Excursion to Germany. Until December 21.

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "'Ionic' Order of Greek Architecture." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, S.W.1. Students' Meeting. Paper on "Well Boring." By H. A. P. Hetherington, Stud. INST.C.E. H. E. STILGOE, M.INST.C.E., will preside. **6.30 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. "Costing Methods for Heating Engineers." By R. C. Ching. **6.45 p.m.**

BOURNEMOUTH AND DISTRICT BUILDING TRADES EMPLOYERS' ASSOCIATION. At Bournemouth. "The Causes and Prevention of Dry Rot." By E. H. B. Boulton. **8 p.m.**

THURSDAY, DECEMBER 5

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Some Notes on Modern Steel-frame Construction." By W. C. Cocking. **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Lettering." By Eric Gill. **5.30—6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Sir Christopher Wren and his Influence on the Craftsmen of his Time." By Percy Lovell. **7.30 p.m.**

UNIVERSITY OF LONDON, University College, W.C.1. "Shelley and Italy." A Public Lecture, by Prof. Edmund G. Gardner, F.B.A. **5.30 p.m.**

LONDON MASTER BUILDERS' ASSOCIATION, 34 Russell Square, W.C.1. Annual Dinner to be held at the Connaught Rooms, W.C.2. **7 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Origins of Architecture (Greek). I." By Cecil Hallet, B.A., F.S.A. **12 noon**

FRIDAY, DECEMBER 6

BRITISH MUSEUM, Bloomsbury, W.C.1. "Greek Sculpture. I. (Before 450 B.C.)." By W. W. Skeat, M.A. **3 p.m.**

NATIONAL SMOKE ABATEMENT SOCIETY, Room E. 17, College of Technology, Manchester. "The Abatement of Industrial Smoke." By R. Morton Rowe. **7 p.m.**

SATURDAY, DECEMBER 7

Sunrise, 7.53 a.m. Sunset, 3.50 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." 12 noon. "English Seventeenth-Century Furniture." 3 p.m. Both lectures by L. O. Faraker. "Indian Section: Sculpture." By T. F. Wilson, F.R.S.A.I. 3 p.m. **12 noon**

MONDAY, DECEMBER 9

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Eighteenth-Century Furniture." 12 noon. "Italian Renaissance Furniture." 3 p.m. Both lectures by L. O. Faraker. **12 noon**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Greek Sculpture. I. (Before 450 B.C.)." By Cecil Hallet, B.A., F.S.A. "Monuments of Egypt. II." By W. W. Skeat, M.A. Both lectures at 3 p.m. **3 p.m.**

TUESDAY, DECEMBER 10

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "The Nature and Effects of Glare." By W. S. Stiles (National Physical Laboratory). **7 p.m.**

TOWER OF LONDON, E.C. 3. "The Tower in the Middle Ages." By Allen S. Walker. (Lantern illustrations.) **11 a.m.**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Greek Sculpture. II. (Elgin Marbles)." By Cecil Hallet, B.A., F.S.A. "Monuments of Assyria. II." By W. W. Skeat, M.A. Both lectures at 3 p.m. **3 p.m.**

ILLUMINATING ENGINEERING SOCIETY. At the Home Office Industrial Museum, Horseferry Road, Westminster, S.W.1. A discussion on "Problems in Illuminating Engineering" will be opened by a series of short contributions on different subjects. Light refreshments, 6.30 p.m. **7 p.m.**

WEDNESDAY, DECEMBER 11

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Overheads and other Factors Influencing Road Transport Costs, from an Engineer's Viewpoint." By Major Charles Wheeler, O.B.E., M.I.A.E. John Maughling will preside. **8 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Informal Meeting. Discussion on "The Heating of Buildings by Electricity off Supply Mains, with Special Reference to the Problem of Heat Storage and Off Peak Loads." By Arthur H. Barker, B.SC., B.A., M.INST.C.E. Sydney B. Donkin will preside. **6 p.m.**

WEDNESDAY, DECEMBER 11—*contd.*

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, DECEMBER 12

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Veneering, Past and Present." By C. A. Hindley. **7.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Mediæval Brasses." By Muriel Clayton. **5.30—6.30 p.m.**

FRIDAY, DECEMBER 13

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. Annual Dinner to be held at the May Fair Hotel, London, W. 1. 6.45 p.m. for 7.15 p.m. Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Informal Meeting. Discussion on "Welded Steel Structures," to be opened by A. Lakeman, L.R.I.B.A. 7 p.m. **7.15 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C. 1. "Greek Sculpture. II. (Elgin Marbles)." By W. W. Skeat, M.A. **3 p.m.**

NATIONAL SMOKE ABATEMENT SOCIETY, Room E. 17, College of Technology, Manchester. "General Aspects of the Smoke Problem." By Arnold Marsh, M.SC.TECH. **7 p.m.**

SATURDAY, DECEMBER 14

Sunrise, 8.1 a.m. Sunset, 3.49 p.m.

MONDAY, DECEMBER 16

R.I.B.A., 9 Conduit Street, W.1. General Meeting. Debate on "Are Building Bye-laws Destructive of Rural Beauty?" To be opened by M. H. Baillie-Scott, F.R.I.B.A. **8 p.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Students' Pantomime. Until December 20. **8 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Greek Sculpture. II. (Elgin Marbles)." By W. W. Skeat, M.A. **3 p.m.**

TUESDAY, DECEMBER 17

TOWER OF LONDON, E.C.3. "The Tower in Tudor Times." By Allen S. Walker. (Lantern illustrations.) **11 a.m.**

WEDNESDAY, DECEMBER 18

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Students' Pantomime. Matinee at 2.45 p.m. Evening performance, 8 p.m. **2.45 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Architectural Rendering." By E. M. K. Ellerton, A.R.I.B.A.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture (1)." By L. O. Faraker. "Indian Section: Cave Paintings." By T. F. Wilson, F.R.S.A.I. Both lectures at 3 p.m. **3 p.m.**

THURSDAY, DECEMBER 19

BRITISH MUSEUM, Bloomsbury, W.C. 1. "Origins of Architecture. II. (Romans, etc.)." 12 noon. "Monuments of Egypt. III." 3 p.m. Both lectures by Cecil Hallet, B.A., F.S.A. "Greek Sculpture. III. (Mausoleum, etc.)." 3 p.m. By W. W. Skeat, M.A. 3 p.m. **12 noon**

FRIDAY, DECEMBER 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture (2)." By L. O. Faraker. "Chippendale." By T. F. Wilson, F.R.S.A.I. Both lectures at 12 noon. **12 noon**

SATURDAY, DECEMBER 21

Sunrise, 8.6 a.m. Sunset, 3.50 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Mogul Design." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

TUESDAY, DECEMBER 24

TOWER OF LONDON, E.C. 4. "The Tower in Stuart Times and After." By Allen S. Walker. (Lantern illustrations.) **11 a.m.**

THURSDAY, DECEMBER 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. 12 noon. General Tour. By T. F. Wilson, F.R.S.A.I. 3 p.m. "English Furniture." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon**

FRIDAY, DECEMBER 27

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. **12 noon**

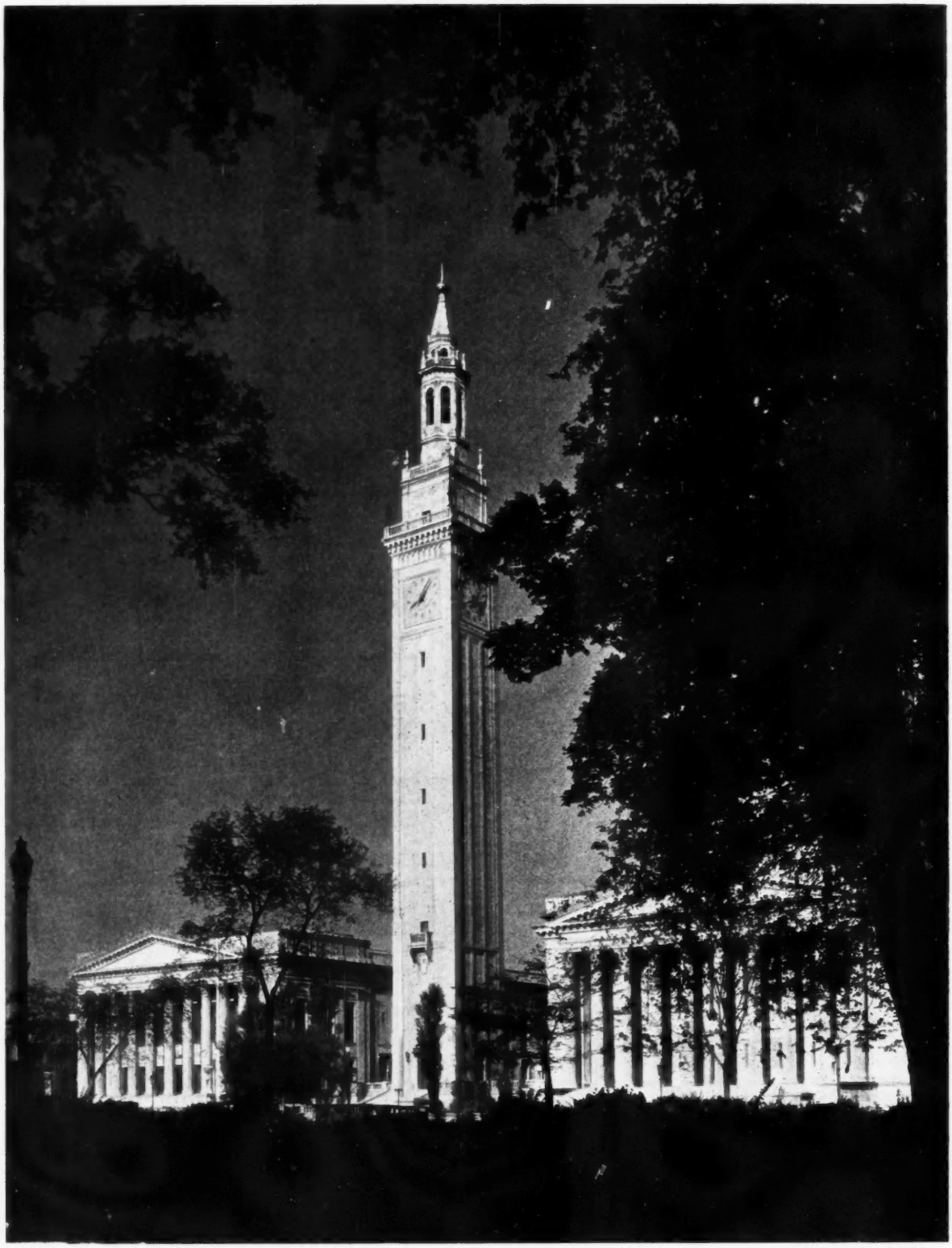
SATURDAY, DECEMBER 28

Sunrise, 8.8 a.m. Sunset, 3.55 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Mogul Paintings." By T. F. Wilson, F.R.S.A.I. **3 p.m**

TUESDAY, DECEMBER 31

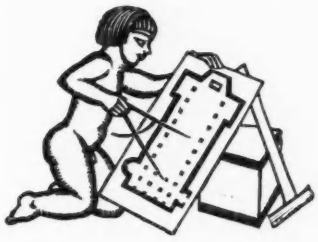
VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." 12 noon. "English Mediæval Sculpture," 3 p.m. Both lectures by T. F. Wilson, F.R.S.A.I. **12 noon**



GROUP OF MUNICIPAL BUILDINGS, SPRINGFIELD, MASS., U.S.A. [*By Pell and Corbett.*

The building on the right is the headquarters of the Mayor and Town Council, Board of Education, etc.; that on the left has a municipal auditorium to seat 5,000. This has been so successful, acoustically, that it has been repeated in other cities. The campanile marks the civic centre of the city, and has lifts to the observation platform. These buildings, which stand on a terrace facing the open square and commons of the city, took four years to complete and are built in limestone. The cost of the whole was £400,000 at the time of erection—1912.

THE ARCHITECTS' JOURNAL



WEDNESDAY, DECEMBER 4, 1929

NATIONAL PARKS

A Crying Need of Today

" How keep quietness for those who love quietness ;
and give play room for the noisy ones ?
. . . And who pays ? "

WHAT is a National Park?

It is a large area of beautiful country given over to the mental and physical recreation of the nation. We are familiar with the ideas underlying the system of providing small parks and reservations in proximity to dense aggregations of population. As it is obviously wrong to herd masses of people together so that they are denied the sight of Nature in anything but the murky skies above them and the dismal rains and mists about them, we try to rectify the error by reserving small pieces of land, upon which we try to reproduce some semblance of natural beauty.

The parks and gardens that we make generally fail in their objects, because their use by crowds of people engenders compromise. Such as they are, they suffice for their purpose. They bring some change and a degree of restfulness and spiritual comfort.

If they were bigger and there were enough of them to make every manufacturing town a place of varied scene, in which the passage of the seasons was vividly reflected in the foliage and herbage visible on every hand, there would be no need of National Parks. If towns were so interspersed with country, and if townsmen were one-half again as nature-wise as they are, townsmen would not wish to escape from their surroundings to take holidays in the country and by the sea. They would not swarm to Brighton and Blackpool. They would mostly be happy where they were, spending their leisure in their own parks, and what they now pay in railway fares in pleasant drinks under trees.

Instead of which, the towns being ugly and town parks drab, the townsman leaves his street whenever the good weather reminds him of pleasanter places in the country outside, and there takes place the seasonal and the weekly exodus, carried by good roads and railways into all the parts of this small land.

It is the spread of this habit of short holiday-making, helped on by a system of rapid communications, that has resulted in a certain sense of awareness of Nature on the part of all classes of people, only when, alas, the means of producing this state has but half-destroyed the objects towards which it moves.

If, having made a mess of the problem of creating towns, we have gone on to spread the same blight of careless exploitation to the countryside, there is nothing for it but to create districts in which the seemingly instinctive desire on the part of uneducated townsmen to destroy the wild life and to shatter the peacefulness of the country is held in check by regulations and by more or less strict prohibitions. Doing this, we create a National Park.

It is, we think, certain that the time has arrived when National Parks have become a necessity. But there are many things to be considered as part of the problem. Chief among these is the effect of actually inviting masses of people to use the parks. It is agreed that the most peaceable of human invasions is inimical to the native flora and fauna; these must be preserved. Then how divide the warring factions? How keep quietness for those who love quietness; and give play room for the noisy ones? How define, in short, our moral attitude towards the thing? And who pays?

All these things, and many more, must be debated and discussed by all, as they were discussed last week by the C.P.R.E., before National Parks become practical politics and ready for adoption.

NEWS & TOPICS

UNENLIGHTENED SHEFFIELD

I TAKE it to be the precursor of coming events that the replanning of the central portions of our larger towns and cities is daily becoming more of a matter for practical politics and of public concern. Bradford, Leeds, Hull and other towns have all made efforts to start replanning from the centre; and now it seems that Sheffield, less enlightened than other places, is being hotly instructed by educated public opinion to devise an architectural scheme for the layout of the Fitzalan Market site, or for ever perish in its own chaos. It appears that the town, with this exceptional site in its possession, was granting leases with no restrictions as to architecture, and with no preconceived intention of doing anything but let the *usual* development take its sordid course. For such a thing to happen would be a disgrace to a town which is in such desperate need of some street or open square that is definitely laid out to be beautiful. An open competition is most clearly indicated.

GUILDFORD CATHEDRAL

A beautiful site on Stag Hill has been definitely selected for the proposed new Cathedral of Guildford. Although the foundations will have to be carried some distance into the ground, there are other factors that will successfully offset this additional expenditure, and it may be said that the search for a site is now ended. This settled, and money being forthcoming, it has been decided to hold an open competition for the appointment of an architect, with Mr. Walter Tapper as assessor; which, coming after the recent rebuffs which the profession has received at the hands of the Office of Works, is a welcome sign that the patronage of the greater estates of the realm is not entirely departed from us. Could there, by the way, be any matter so little open to safe prophecy as the exact form which this new cathedral will take? I trust that it will be a revival of nothing but simplicity and clear thinking.

POWER-STATION FUMES

The damaging effects of the dust and fumes from power-station boiler-house chimneys are at last receiving long-called-for attention. The project for the Battersea power-station, to be situated in the heart of London, has done much to bring the matter to a head; and the report recently issued by the Ministry of Transport, comprising the interim reports of the advisers to the London Power Co., and the committee presided over by the Government chemist, indicates that a solution is within sight. The problem of dust discharge has been partially met already by various means, such as the introduction of dust-catchers, which at least serve to remove a considerable proportion of the ash which is carried over by the flue gases in both pulverised-fuel firing and mechanical-stoker firing. The emission of black smoke has been virtually eliminated in modern power-plant operation, and the practically complete prevention of dust discharge would seem to call for merely an extension or elaboration of one or other of the processes which have now been under trial for a year or two.

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The mere removal of the dust, however, does not prevent the discharge of sulphurous fumes, and the compulsory use of low-sulphur coal in order to minimise the trouble has been strongly advocated. This, in any case, is desirable, as the greater the quantity of sulphurous fumes produced from a power station, the greater is the cost and difficulty involved, even when the technical problem of their removal has been solved.

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Water-spraying in conjunction with some form of expansion chamber to assist the gases in precipitating their dust has already gone a long way towards the removal of both dust and sulphur; and in view of the fact that the scrubbing of gas in other departments of industry has attained a high state of efficiency, there is no reason to believe that the 95 per cent. removal of sulphur from power-station flue gases, which the Ministry's report indicates, cannot be consistently obtained in general practice. Additional cost and modification of existing apparatus will in most cases be necessary, and the trouble of handling the resulting acid effluent will always have to be faced. The treatment of flue gases must, for the future, be regarded as an essential feature of power-plant operation and be catered for accordingly. Technically, the question may be considered as solved, and, economically regarded, the damage resulting from the discharge of non-treated gases makes it impossible to allow the question to remain without proper attention. It is better to pay a known cost for dealing with the problem than to submit to the indefinite but insidious and extensive damage to health and property which would otherwise be incurred.

LONDON'S UNIVERSITY SITE

Much has been written of late regarding the proposed development of the University site at Bloomsbury. Good progress has been made in arranging about the future roads and the general lay-out of the most important buildings. It is probable that before long we shall be told something of the architectural plans, and that one or two of the most important buildings will be available for open competition. There have been many surmises and rumours, but little has been said regarding the real crux of the situation—finance. No doubt the Senate of the University of London have made some kind of estimate of the probable total cost of establishing a University centre close to Tottenham Court Road, and I am told that this estimate is in the neighbourhood of seven million pounds. If this is so, and if trade does not revive quickly, it will be long enough before the present ideals fully materialise. This great enterprise will need courage, as well as a capacity for successful begging, to carry it through to a conclusion.

WALLS AND RAILINGS IN LONDON

Proposals to set back the railings of Hyde Park have been put forward from time to time, and, for some obscure reason, have been turned down without question. I can see nothing but good in these proposals. A wider and grander Bayswater Road would be worth having. Park Lane, too, no longer a lane, would be ever so much finer for an increase in width. There are other examples of roads which, being shut in by high walls, are dull and interminable; but, transformed by the inclusion of a line of trees and grass and flowers into the semblance of a boulevard, would be interesting and never long enough. The road that runs by Kew Gardens from Kew Bridge to Richmond is a case in point. The wall is high and bare, the pavement at its base narrow, and the reverberating echo from heavy traffic uncomfortable both for pedestrians in the street and for the residents on the



[*By E. J. May.*

A shapely pillar-box-cum-direction post, erected at Toddington.

opposite side. Another twenty feet of width would turn it into a really noble thoroughfare, and Kew Gardens would lose what it could well afford.

THE HAPPY TOUCH

Going to and fro in England, one sometimes espies the happy touch in quite ordinary things. This letter-box and signpost in one is remarkable on account of its really good design much more than for its novelty. It is obviously and essentially a rural letter-box, guarding His Majesty's mail in a stout covering of stone. Many rural letter-boxes are so walled in for security's sake. But this one, with its excellent proportions and well-weathered mouldings, adds so much of significance and dignity to its calling as to place itself in a class apart; to be held up as a model. Its quality of design reminds me of some of the finer tombs of the early nineteenth century, designed under the influence of Greek and Roman later revivals. One could find its counterpart in Moses' "vases and candelabras," which goes to prove how everlastingly recurrent is the spring of really true classic inspiration.

SAVING EDINBURGH

It comes as a shock to learn that the future of some of the finely planned streets and squares of Edinburgh is by no means protected against the degradations of commerce. When Charlotte Square was built to Robert Adam's design, it was assumed that the design would remain, and the Charters were granted without restrictions. Today, this architectural gem is threatened, and the Corporation are without adequate powers for preserving it. A special town planning scheme, proposed for the purpose of providing these powers, has quite recently been the subject of a public inquiry by the Department of Health for Scotland, and I hear in addition that a more comprehensive survey of the needs for, and possibilities of, a general town plan is being undertaken.

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A town plan, however finely conceived, being part of a living and expanding organism, is bound to feel the stress of heavier and swifter traffic and the press of expansion—outwards and inwards from the suburbs. Readjustment is a necessity. If there is a feeling that Charlotte and George Squares are in danger from these causes, it is wise to protect them on the spot from ill-usage; but it is still wiser to look farther afield for the causes of the congestion. A reorganization of the whole town is more likely to preserve these Squares as useful members, than the erection of legal barriers against an advance for which no alternative outlet has been discovered.

INTERNATIONAL BUILDINGS AT THE CITE UNIVERSITAIRE

Last month the foundation stone of the New Dutch House at the Cité Universitaire in Paris was laid. I have had an opportunity of studying the plans, and it is clear that a hostel of extremely modern design, somewhat similar to several new buildings that have recently been built at Amsterdam, will in course of time take its place amid the conglomeration of buildings at the Cité. This so-called international settlement for students is, I fear, developing into a kind of Wembley. The French House is mock-Gothic. The Belgians have a hostel that looks like a hotel transplanted from Ostend. The new American House, which will be opened next year, is frankly bad from the architectural point of view, and might just as well be a warehouse for cotton goods in Indianapolis. The Japanese have erected a purely Japanese House from which you expect geishas, rather than academic students, to appear. The Argentine House, in which there are apparently few students, has distinct architectural merit. Parisians are wondering what the Indo-Chinese and other nations will erect. Great Britain's architectural interests are, however, entrusted to the sure hands of Mr. Edward Warren, and his plans indicate that this country will in time have a house of real charm and merit.

CONCRETE FOR TELEGRAPH POLES

Mr. J. H. Thomas, pursuing his plans for cutting down the large imports of foreign timber into England, is going to see what may be done in the way of concrete in place of wooden telegraph poles. At the present time the concrete pole, which has been used on the Continent and in America, is 15 per cent. dearer than the wooden one, but lasts much longer. I have seen concrete poles and pylons in Belgium, and I have read in Belgian newspapers letters of protest against their appearance in the beautiful Ardennes. This is a side of the question in which Mr. Thomas is probably not so keenly interested as in the more pressing need for providing employment for English works and workmen. Nevertheless, when he consults his concrete experts, he would be well advised to make beautiful his way by inviting the opinion and services of those who can see that concrete shall look better than the old familiar wooden stumps.

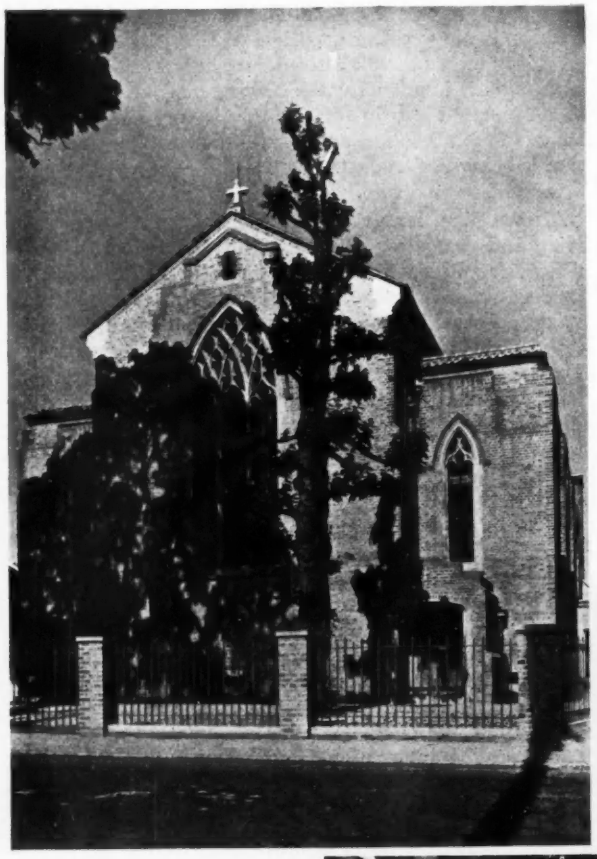
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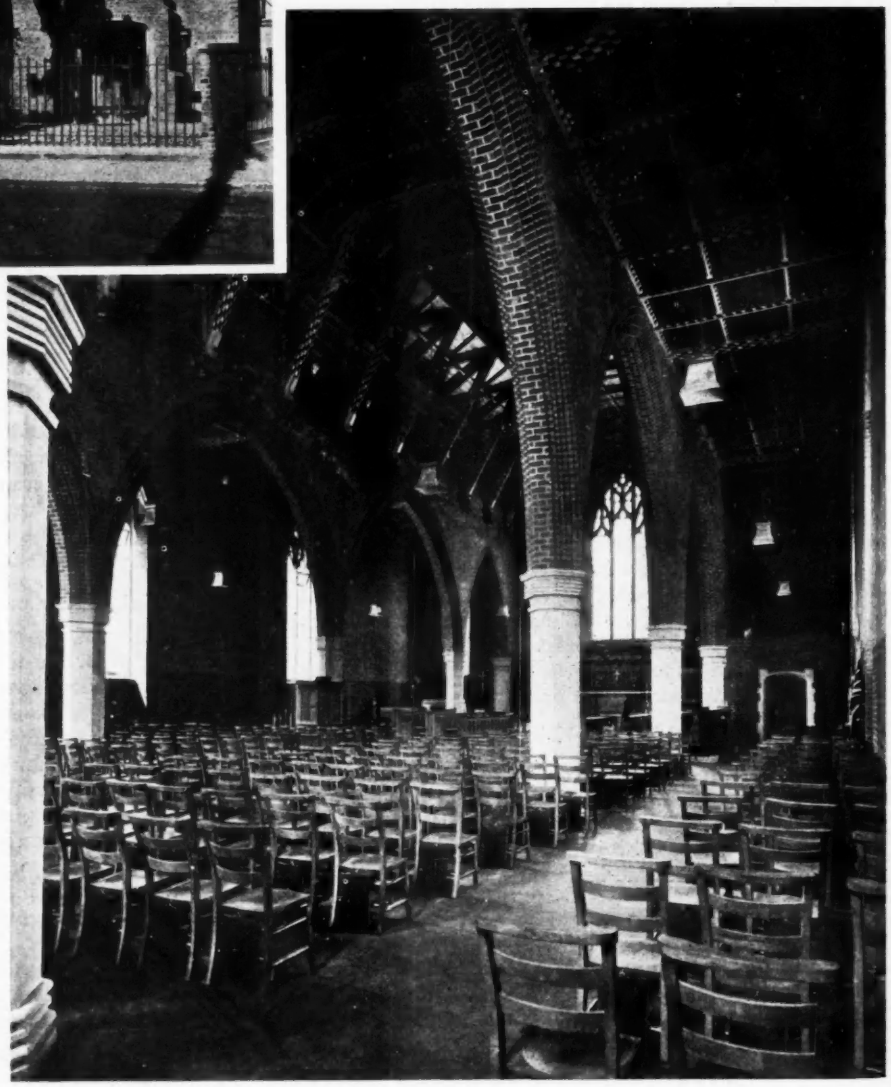
ST. ANSELM'S CHURCH,

THE church of St. Anselm, recently erected at Hayes, Middlesex, one of London's rapidly-growing industrial satellite towns, presents two aspects of particular interest—the exterior, in which is seen a modern interpretation of Gothic in brick, with window mullions and tracery in stone; and, internally, the painted wooden roof, intricately detailed. Its note in the colour scheme is bright rather than rich.

Rectangular in plan, the building has a total seating capacity of about 550, and consists of a nave 25 ft. 6 ins. wide by 116 ft. long, and two aisles, each 10 ft. 6 ins. wide, together with choir and sanctuary. The walls are of the local straw-coloured stock bricks, relieved, externally, on the angles and in the stringcourses, by Binfield reds. Internally, too, these materials tell ; the red bricks used with the stocks in the arches of the nave arcades, the dado that runs all round the building, and the jambs of window recesses, have been carefully selected to this end. The aisle and vestry roofs are flat, but the pitched timber roof over the nave is covered with Old Delabole slates, carefully graduated in size from the eaves to the ridge tiles, which



General view of the west end. The church is built of the local stock bricks, of a straw colour, relieved by reds. The windows are in Weldon stone, except for their Clipsham stone cills. Red brick and pantiles form the copings to the aisle walls. There are two entrance porches, giving direct on the side aisles ; their doors, as throughout the building, are in English oak.



This view, looking from near the southerly porch towards the east, gives some indication of the treatment of the painted roof. Piers of the nave arches are 10 ft. high, of Clipsham stone, with moulded caps and bases. The arches themselves are in stock and red bricks. The door at the end of the aisle leads to a vestry ; the organ chamber is above.

HAYES, MIDDLESEX

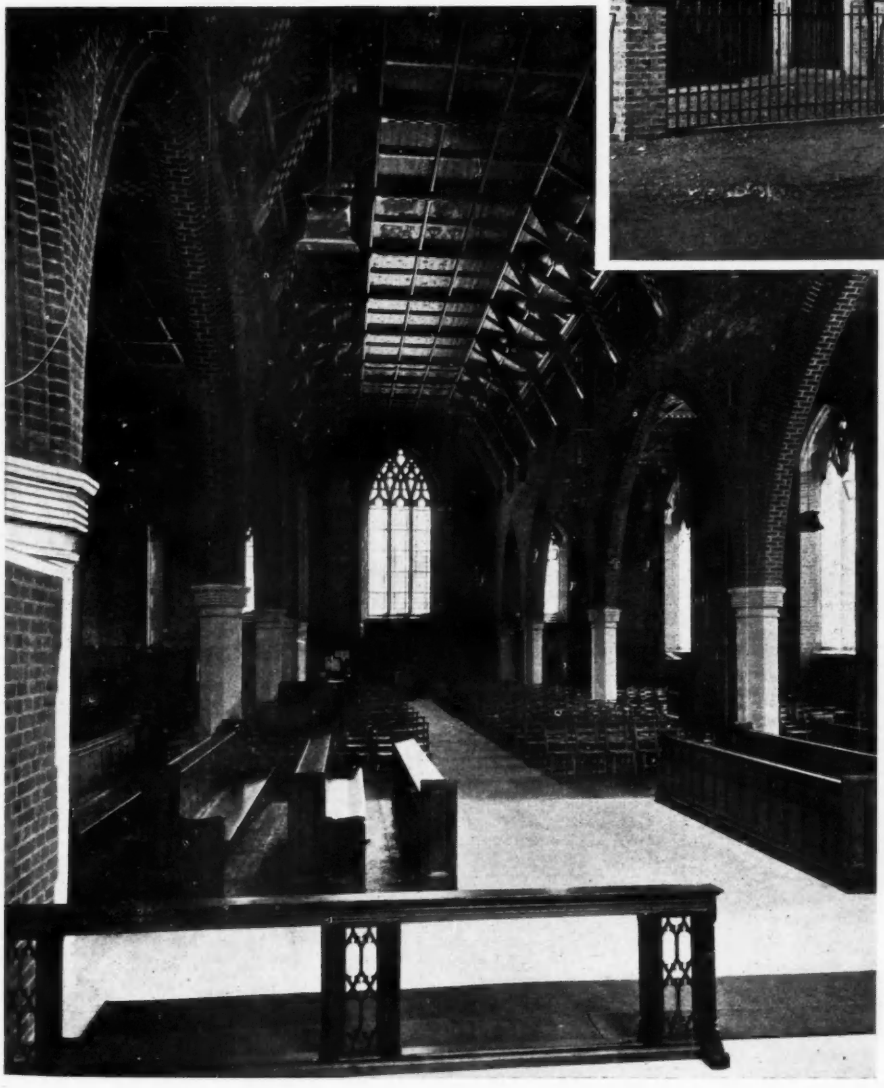
: HUBERT C. CORLETTE

are dark blue-grey in colour. Copings to the aisle walls are in red brick and pantiles, while, below the eaves of the nave roof is a brick cornice of red and stocks, decoratively combined. A little below it, as also at a high level in the aisle walls, glazed apertures, provided for cross-ventilation, play an effective part in the design. The windows have cills of Clipsham, the same stone in use for the restoration of the Houses of Parliament, employed also for the two gable-end crosses; the moulded jambs, mullions and traceried heads, however, are in Weldon stone.

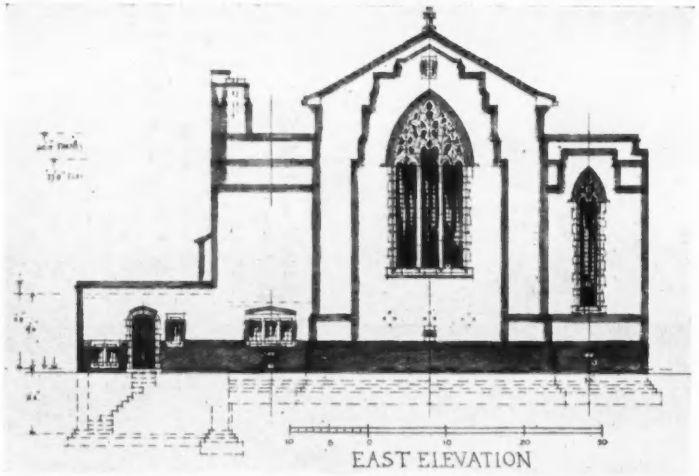
On entering the church through either of the western porches, a first impression of lightness arises from the gracefully slender proportions and from the pale tones of the Clipsham stone piers, the brick arches of the nave arcades and the painted roof, its prevailing cool blue only slightly qualified by the missal-like decoration. Here the eye lingers. The whole of the ceilings have been designed as a series of panelling and illuminated in colour. The structural timbers are finished in white, with a chequered pattern in black and a quiet red superimposed :



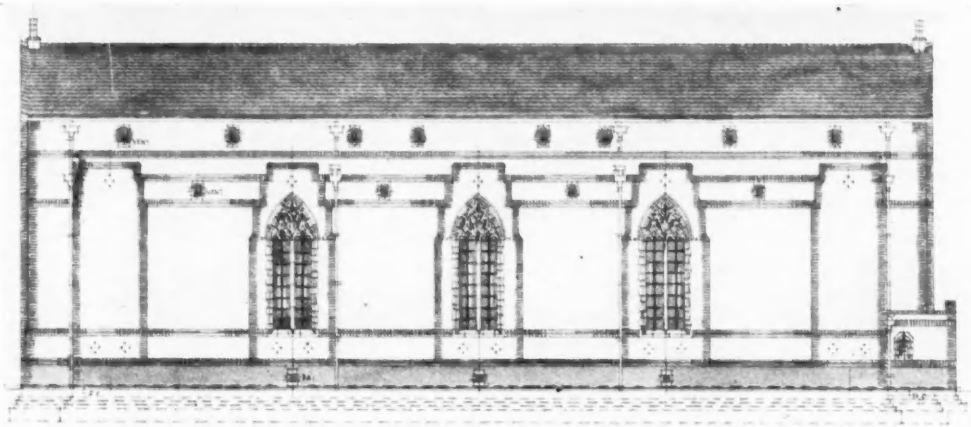
The south-east corner, showing the bell-cote and the choir vestry, with its separate entrance, from the porch of which access is also given direct to the south aisle. The vestry is 30 ft. long and 16 ft. wide, and has been designed to serve the additional purpose of meetings and parish uses. Its flat roof is of reinforced concrete, covered externally with asphalt.



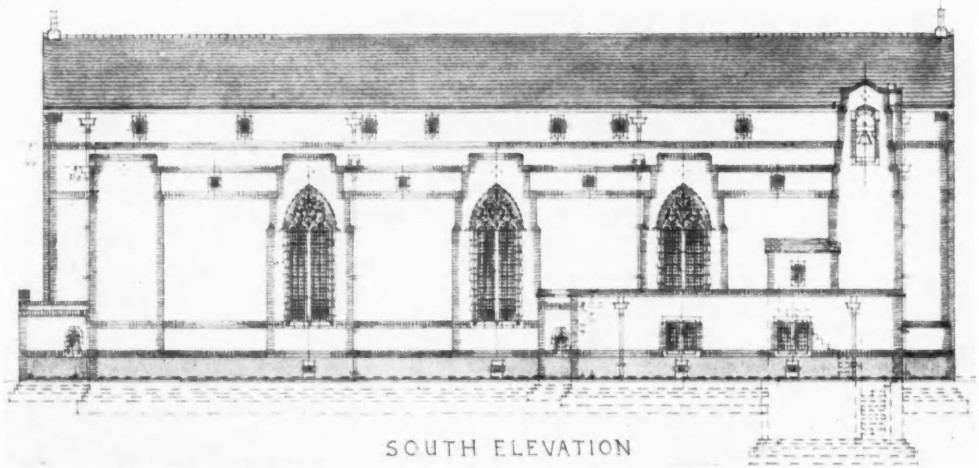
General view of the nave and west window, taken from inside the sanctuary, with the carved oak communion rails and choir stalls in the foreground. The nave is 38 ft. high, and the central portion of the decorated roof has a blue ground. The interior is lighter in tone than this photograph and its fellow quite suggest.



The architect's drawing of the east elevation. The door on the left is the entrance to the underground heating chamber. The three-light window to its right is in the clergy vestry; the tall one, on the other side of the main east window, is at the end of the north aisle.

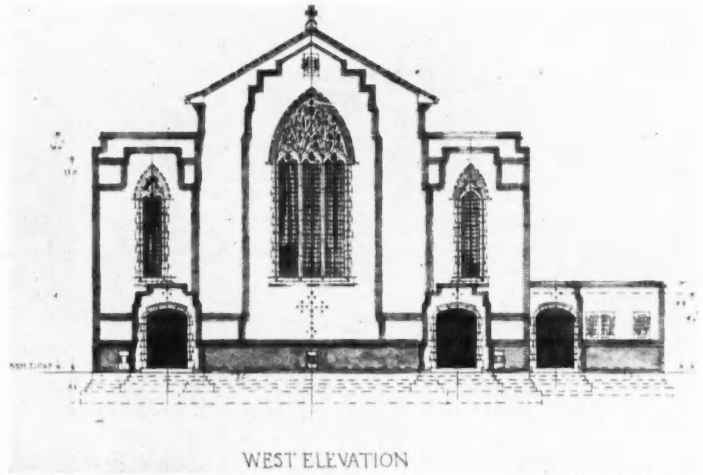


The chief features of the north elevation are the three side windows to the aisle. The part played in punctuating the design by the small glazed apertures, introduced at a high level in both aisle and main walls to provide facilities for cross-ventilation, should be noted. The small window on the right serves to light the northerly main porch. The stringcourses are in red brick, the roof of Old Delabole slates.



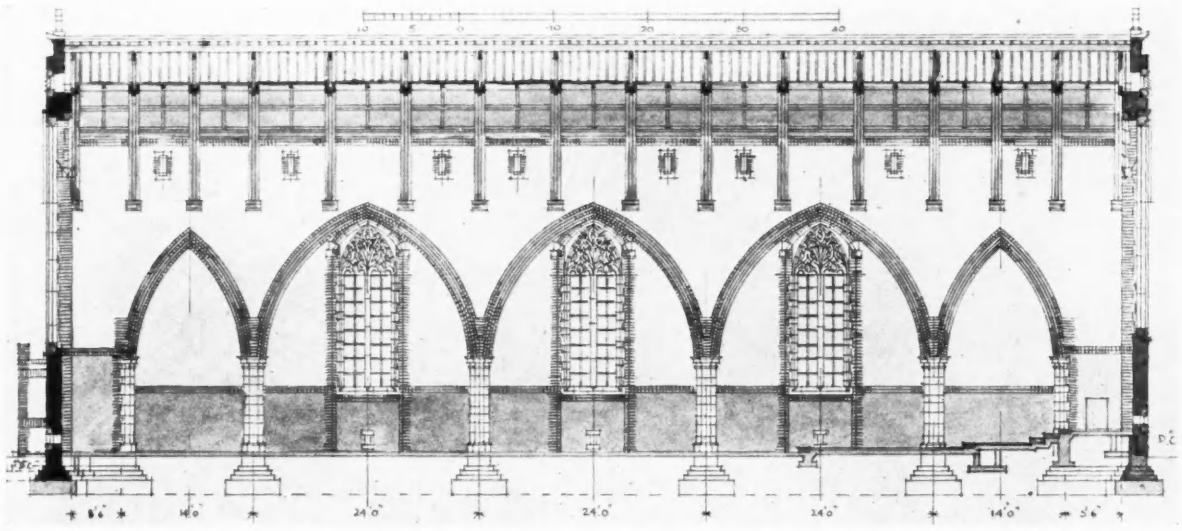
Church of St. Anselm, Hayes, Middlesex.]

In the south elevation, the projecting choir vestry and the bell-cote, for one bell, break the symmetry in an agreeable fashion. The eaves of the nave roof have below them a brick cornice in which red and stock bricks have been combined as decorative materials. Each gable-end bears a cross of Clipsham stone. The ridge tiles of the nave roof are a dark blue-grey in colour. This elevation faces a side road.



[*By Hubert C. Corlette.*

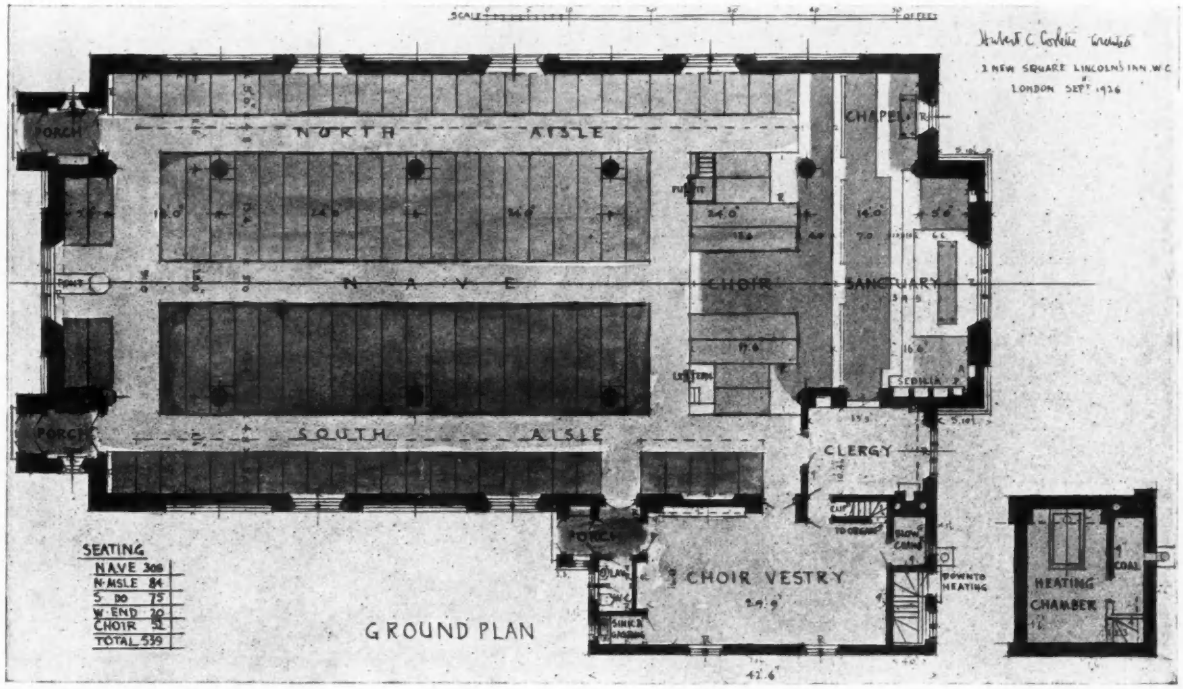
The west elevation faces the main road, and direct access is given to both north and south aisles by the two porches seen, which have English oak doors, set in stone surrounds. The door to the right is that of the porch leading to the choir vestry and to the south aisle.



The architect's drawing of the longitudinal section, looking north, and showing the disposition of the nave arcades.

to the motives that have inspired the panel-treatment an inscription, on a blue ground running the length of the main cornice, supplies the key. "The heavens declare the glory of God" is borne out in the series of eighteen panels in the centre of the nave, representing the sun and the twelve signs of the Zodiac. The sun is in gold, the signs in white on the blue ground that, studded with stars in the centre panels, embraces the whole, except for the west end and the sanctuary. Here, above the altar, done in a golden colour on a white ground, are forty-two panels with symbols mentioned in Revelation. At the west end, a third series of eighteen, above the font, show, principally in white on a red ground, floral patterns and emblems of the Passion. The whole of the panel-work has been drawn out in detail and executed by Macdonald Gill.

Practically every detail of the furniture, including wrought-iron strap hinges and furniture to the oak doors, carving to communion rails and choir-stalls, also in oak, electric-light fittings, and leaded lights, besides altar, reredos, lectern and pulpit, are from the architect's own designs. The acoustics have been pronounced perfect by competent judges. The total cost, including fittings, was £15,000.

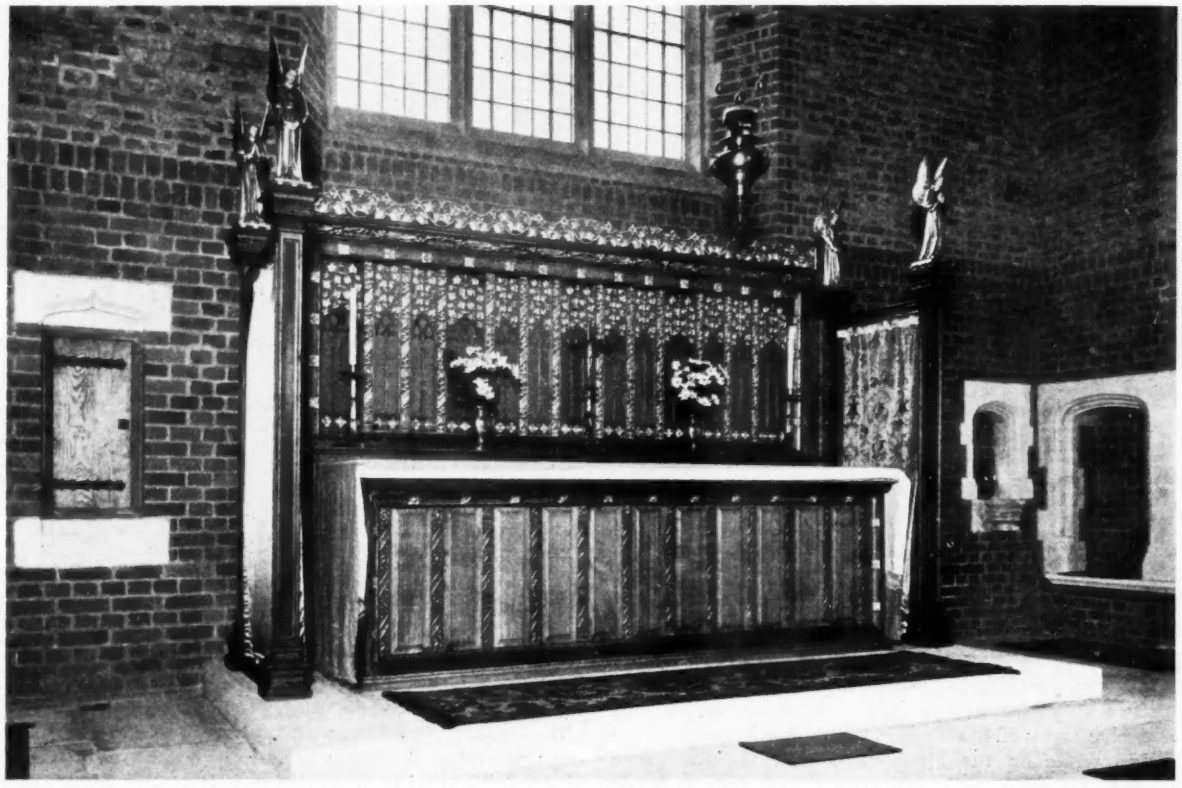


Church of St. Anselm, Hayes, Middlesex.] *[By Hubert C. Corlette.*

Plan of the ground floor of the church, and, at a lower level, of the heating chamber below the choir vestry.

stock bricks have been combined as decorative materials. Each gable-end bears a cross of Clipsham stone. The ridge tiles of the nave roof are a dark blue-grey in colour. This elevation faces a side road.

English oak doors, set in stone surrounds. The door to the right is that of the porch leading to the choir vestry and to the south aisle.

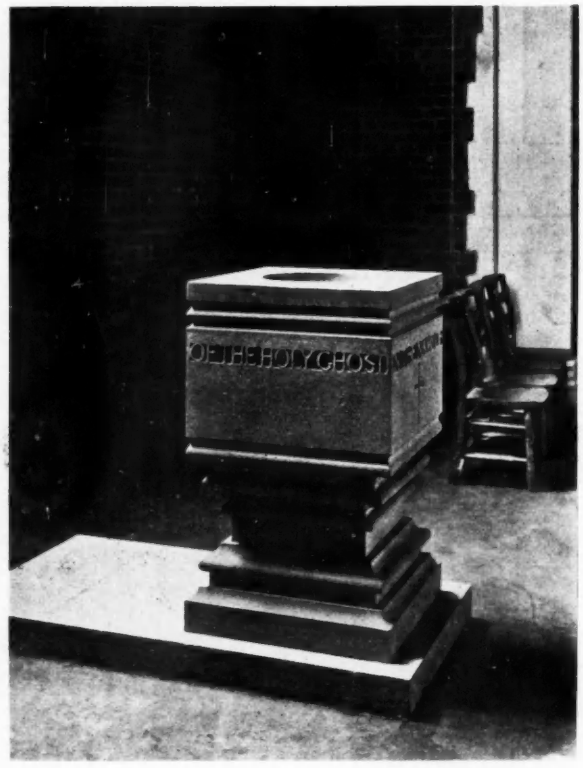


The altar and reredos, in oak, carved, gilt and painted, was specially designed by the architect, like all the principal furniture in the church. The four figures of angels are in brass. The detail drawing of the reredos is reproduced on the facing page.



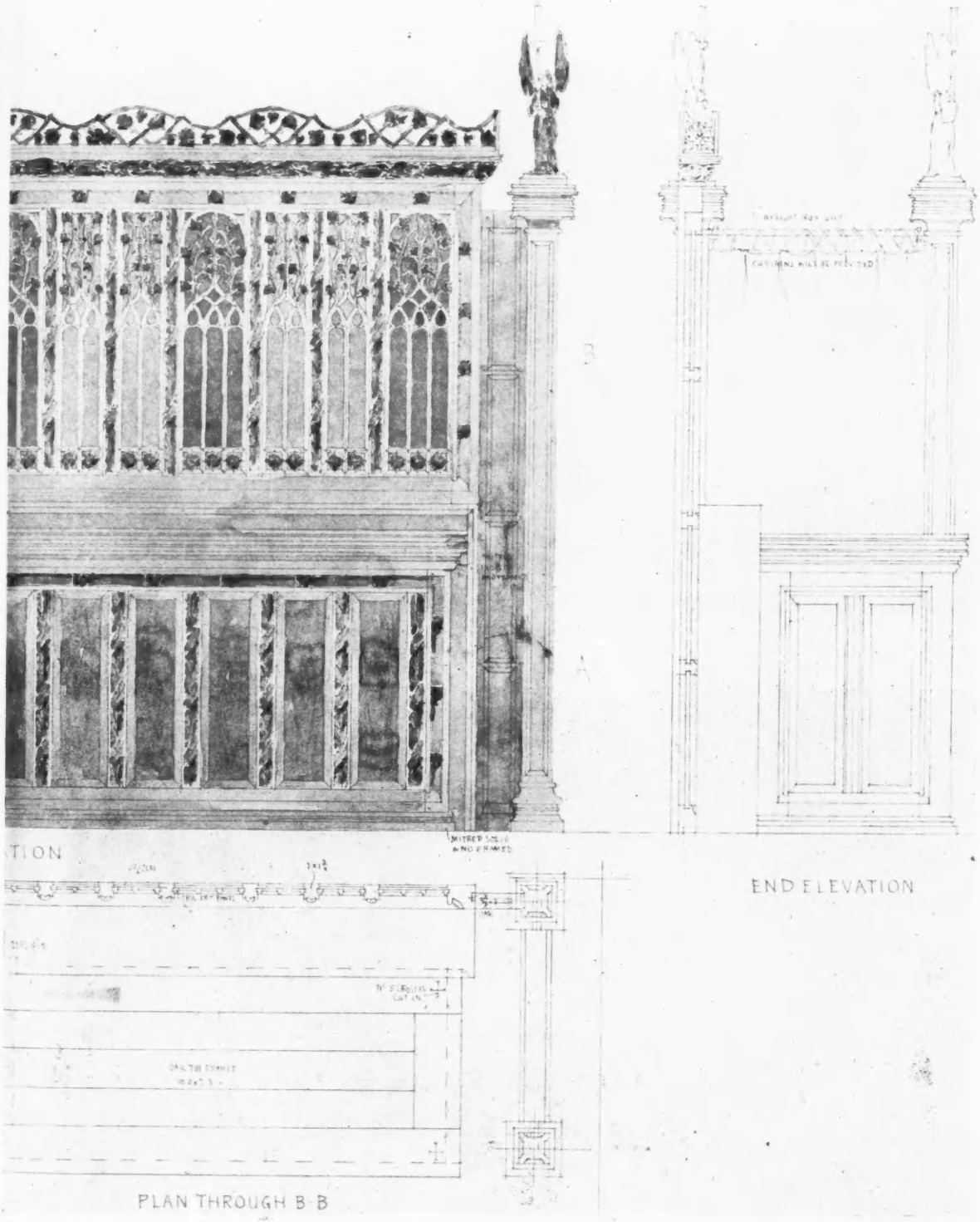
Church of St. Anselm, Hayes, Middlesex.]

Pulpit and lectern are in oak, carved to designs specially drawn, and were made under the architect's supervision.



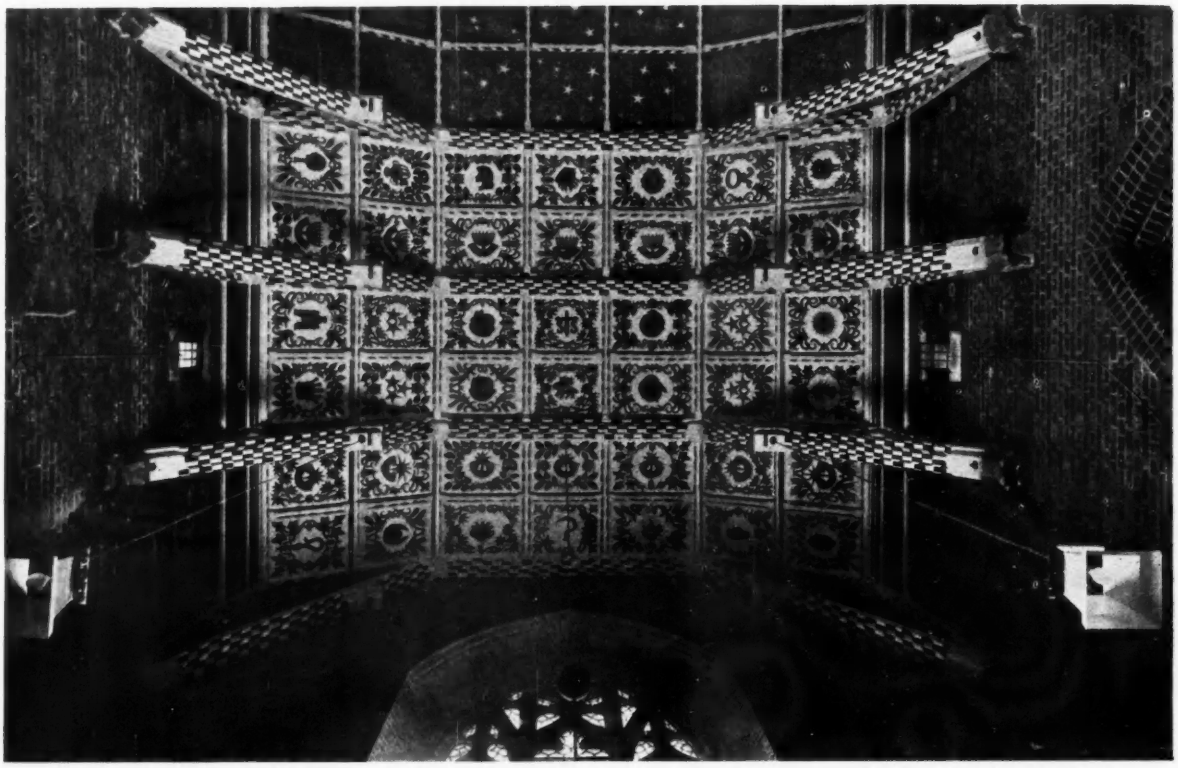
[*By Hubert C. Corlette.*

The font, in stone, is also to the architect's special design, and is inscribed with the dedicatory sentence of baptism.

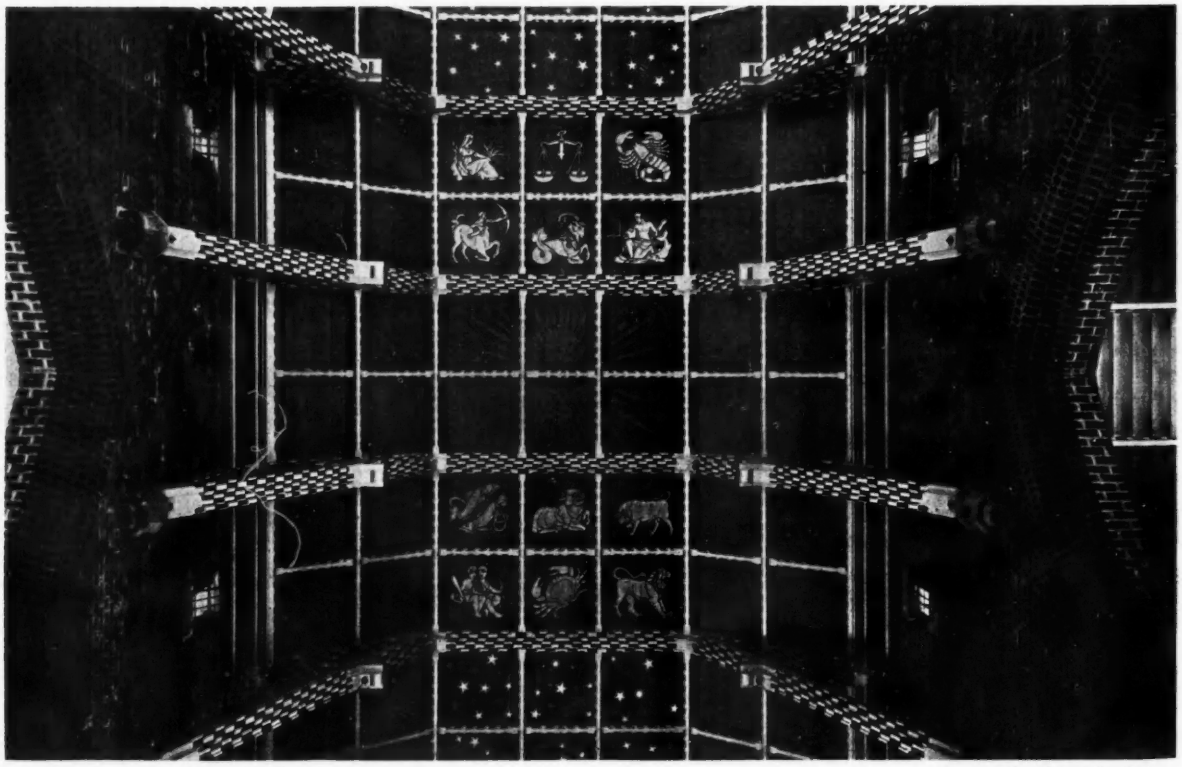


Church of St. Anselm, Hayes, Middlesex.] [*By Hubert C. Corlette.*

Half of the architect's working drawing of the altar reredos, of which a photograph appears on the facing page. By careful comparison with this photograph an indication can be obtained of the portions of the design to which gilt has been applied. The whole is in English oak. Although the design abounds in detail, the general effect is quiet and restrained, partly due to the situation, immediately below the east window, from which no very powerful light can fall upon it. The carving was carried out in the workshops of the general contractors.

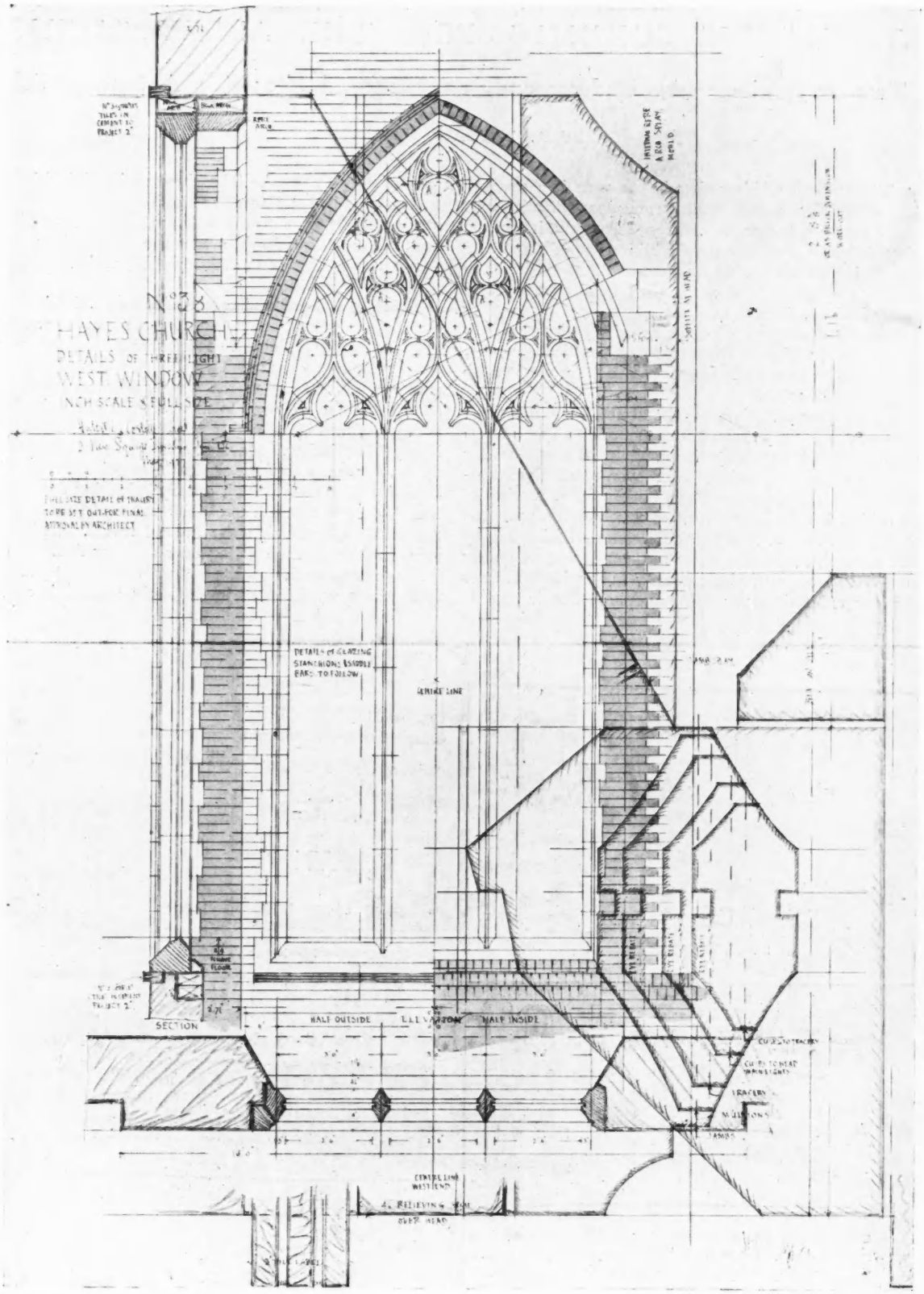


Details of the painted ceiling panels at the east end of the church. These forty-two panels above the altar depict, in a golden colour on a white ground, symbols taken from the Book of Revelation.



Church of St. Anselm, Hayes, Middlesex. [*By Hubert C. Corlette.*

The centre eighteen panels in the middle of the length of the nave show the sun, in gold, and the twelve signs of the Zodiac, in white, on a blue ground. Constructional timbers are in white with chequered decoration in red and black.



Church of St. Anselm, Hayes, Middlesex.] *[By Hubert C. Corlette.*

Reproduction, on a reduced scale, of the architect's one-inch and full-size details of tracery of the main west window.

C

ALTERNATIVE SCHEMES FOR THE ABBEY SACRISTY

ii: Two Suggestions—(A) Underground, on Mediæval Site; (B) A Surface Solution

BY A. TRYSTAN EDWARDS

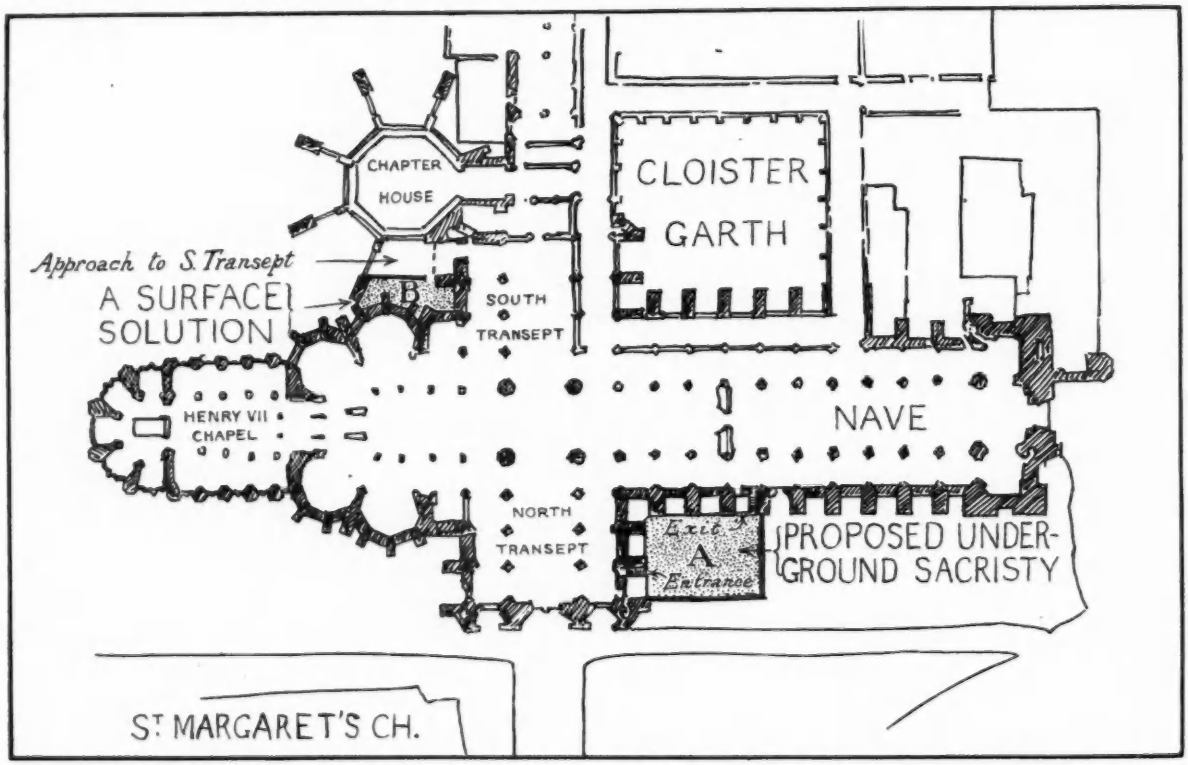
As Westminster Abbey already has near it a number of buildings which make it somewhat difficult for its exterior shape to be envisaged properly, it appears highly desirable that any near additions to it should be rendered inconspicuous. In fact one might go so far as to say that they should be more than inconspicuous and actually invisible from the outside.

I have here attempted to outline two alternative proposals for a Sacristy, which, while serving its practical purpose, will not in any degree whatsoever obstruct the view of the Abbey from the street.

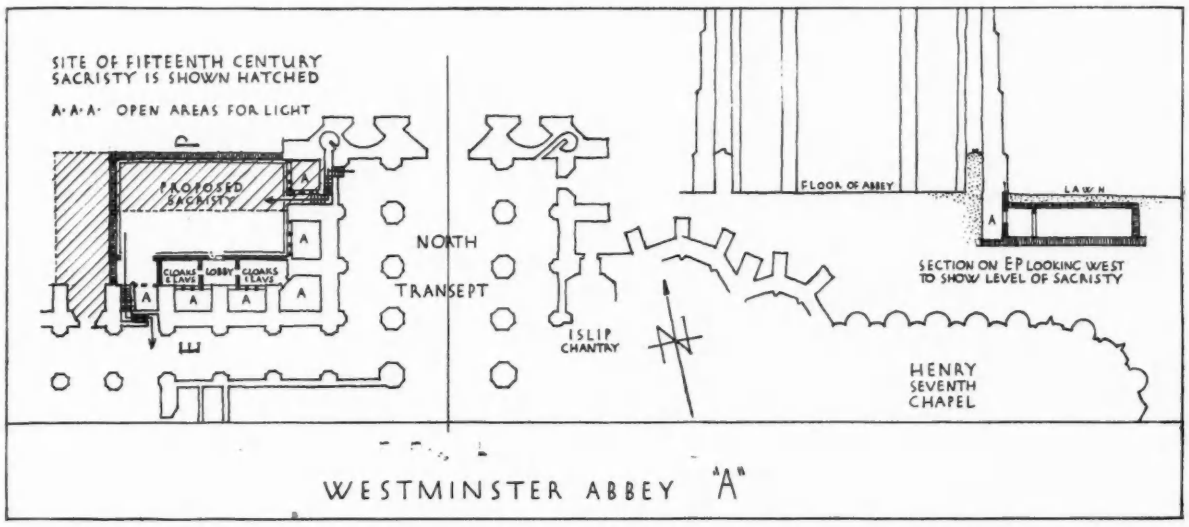
The first alternative is an underground Sacristy on the site upon which the mediæval one stood. The advantage of this solution is that there is an historical precedent for the choice of such a position. Moreover, although excavation entails a certain expense, an underground Sacristy of such a kind is not likely to cost as much as the proposed building between St. Margaret's Church and King Henry VII.'s Chapel, for in the latter instance it was obviously necessary to erect a structure heavily built with buttresses and in fact exhibiting the whole panoply of Gothic decoration in order that it should be worthy to be the neighbour of the Abbey itself. In an underground Sacristy it suffices if the interior is decorously designed, and has its plan conveniently arranged. The three main difficulties to be encountered in the planning of such an underground room are the approaches to the staircase, light and ventilation, and the relationship between the foundations of the Sacristy and those of the Abbey itself, which must on no account be imperilled.

The advantage of having an underground Sacristy on the site of the mediæval one is that the problem of the approach to it can readily be solved. It is here proposed to enter the Sacristy by way of the north porch. On the west side of the transept, quite close to the porch, there exists a spiral staircase. The doorway to this occupies not quite half of a bay, enclosed by an arch, the apex of which is below the level of the window. It would actually be an improvement to the appearance of the wall at this point if a duplicate doorway were constructed, exactly balancing the one here mentioned, so that the two doorways could make a symmetrical pattern inside the arched reveal. While three steps lead up to the existing door the new doorway could be on ground level, opening outwards, so that steps leading downwards would start immediately behind it and the steps, after a quarter landing, would proceed within the thickness of the wall.

This wall is doing no structural work, and its penetration



Sketch plan of part of Westminster Abbey, to show the two suggestions here outlined: (A) Below the ground, on the site of the mediæval Sacristy; (B) on ground level, between Poets' Corner and St. Edmund's Chapel.

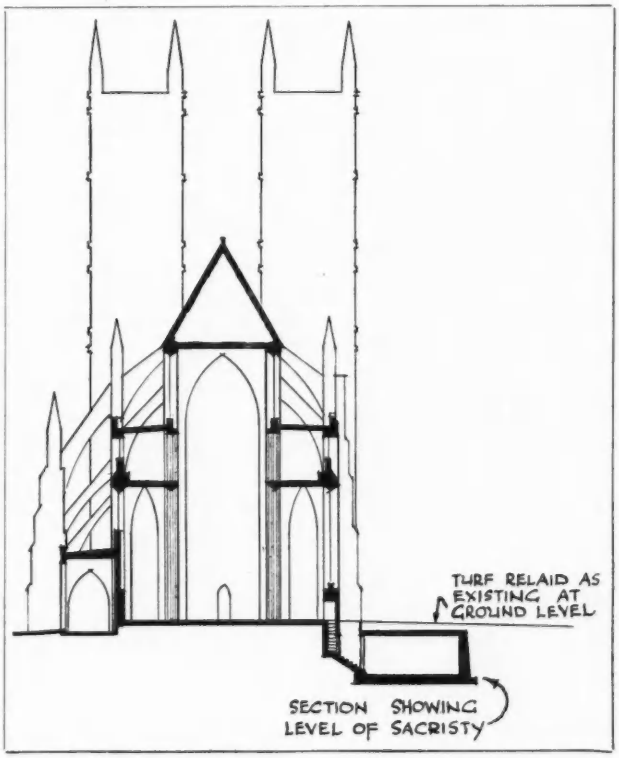


Detailed lay-out of suggestion (A), which would give an area 60 ft. by 45 ft., and includes the provision of stairs down to underground level within the thickness of the walls.

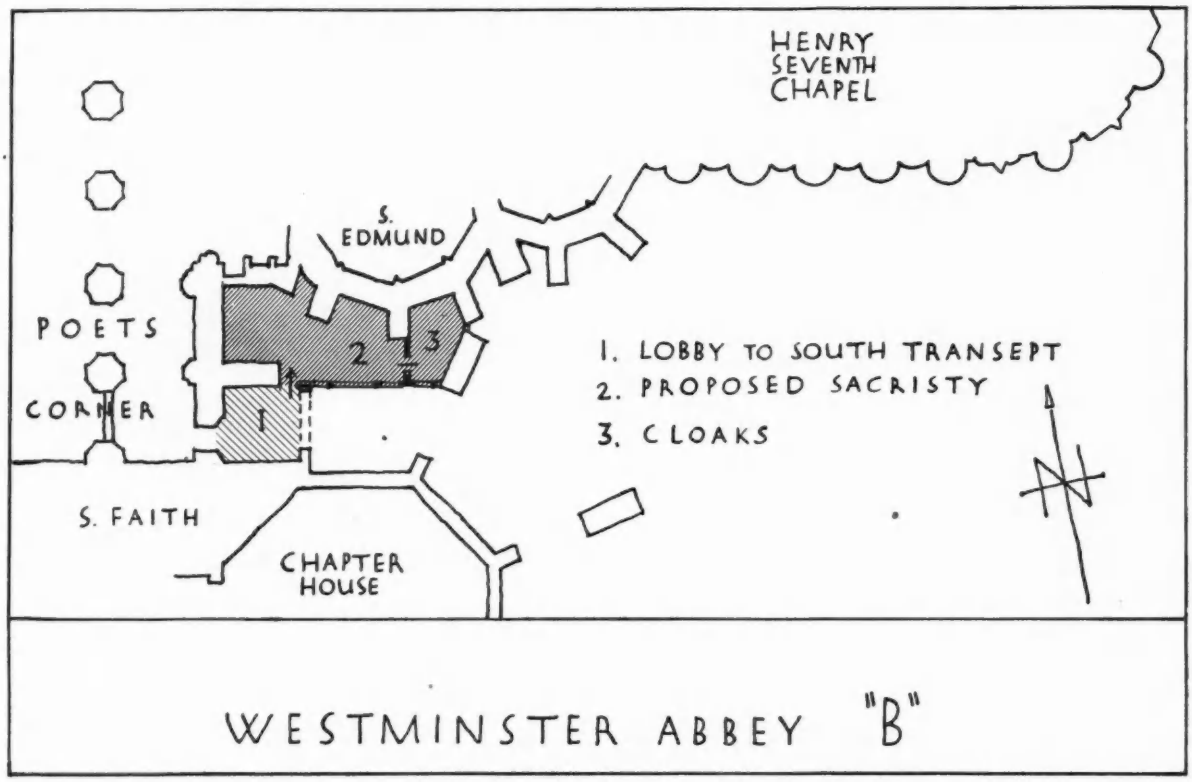
by a staircase would in no way imperil the fabric of the building. At the bottom of this first flight of steps sufficient headroom is provided for persons entering the Sacristy to complete the remainder of the descent without the ceiling of the staircase protruding above the ground level. It will be observed that the existence of the buttresses makes possible no less than six small areas between them, which serve to light and ventilate the Sacristy. These areas will be quite invisible from outside the building, and it may be assumed that the existing railing around the base of the Abbey would be retained. Room has been found for two small cloakrooms and lavatories, which would prove very useful in connection with the Sacristy. The main chamber of the Sacristy would be 60 feet by 45 feet.

In a communication to the Press the Dean of Westminster gave the information that it was the intention to use the Sacristy as a lecture hall in which members of the public who were interested in the subject could be instructed in the history of the various vestments and other precious ecclesiastical objects which are stored in the Sacristy. It will be seen that even if part of the floor space is screened off for cupboards, wardrobes and chests of drawers, especially constructed to receive the articles which require to be stored, there would still be ample room for a lecture hall. It would be assumed, of course, that the light obtained from the areas through the buttresses would be supplemented by electric light, and no difficulty would be experienced in devising an adequate system of ventilation for such an underground Sacristy. For heating, electric radiators could be installed, and this would obviate the necessity of constructing flues.

The architectural style distinguishing the decorations, if any, of this underground chamber would be determined by considerations of historical precedent. It might be possible, for instance, to make the Sacristy to a certain extent reflect the style of the crypt of the Abbey, which itself possesses so much architectural dignity. As the span of the proposed Sacristy is 45 feet across its narrowest section, some columnar supports might be necessary to uphold the ceiling, which might assume the form of vaults with very flat arches. It would be appropriate that some variant of the mediæval style should here be adopted in order that the Sacristy should express a kinship to the great building with which it is associated. On the plan here reproduced I have not attempted to indicate the position of such columnar supports nor of the vaulting which might surmount them, because it is not yet determined how much of the Sacristy will need to be open hall, and how much would be in the nature of a storeroom. There is no doubt, however, that within the height of 12 feet there can be designed a stately chamber worthy of its function.



A vertical section to illustrate the arrangements proposed in suggestion (A).



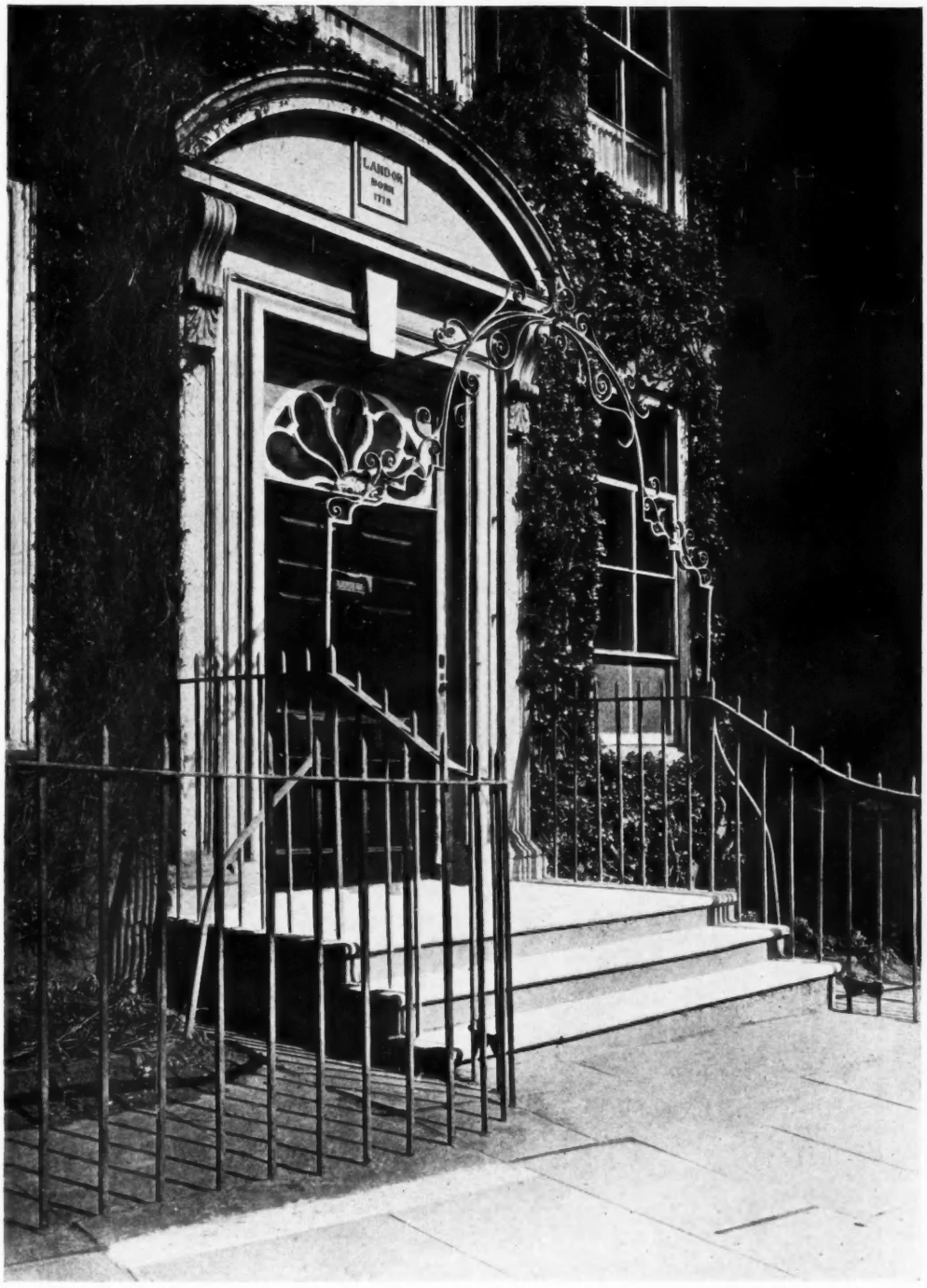
Detailed lay-out of suggestion (B), which proposes the utilization of a space 48 ft. by 15 ft., between Poets' Corner and St. Edmund's Chapel, at present in use as a yard for the storage of building material.

The constructional problems which are here presented, although not easy, could yet be solved without straining the resources of modern engineering. The walls and buttresses adjacent to the staircase approaches to the Sacristy could be underpinned with perfect safety, if it were found that foundations would in the least degree be disturbed by the building of the underground room. It is also possible nowadays to make quite watertight a ceiling of the dimensions shown, even if it is required to support the foot depth of soil which is necessary to maintain a growth of turf.

In the case of the approach to the Sacristy from the north aisle a new doorway would require to be pierced in the wall underneath the window of the fourth bay, counting from the transept. In the fifth bay there is the existing doorway which gave access to the medieval Sacristy, now demolished, and as it is in use as a secondary access to the Abbey and has a separate path leading up to it, the desirability of preserving this entrance is obvious. For this reason the underground Sacristy in the scheme here proposed only extends to the length of four bays of the aisle instead of to the five bays which represented the length of the medieval Sacristy. The additional doorway which would need to be cut into the wall would no more offend than does the existing one in the adjacent bay. It might, however, be necessary to disturb a sculptural plaque which in the reign of Charles II was erected to the memory of a child, seven years old, who had no other claim to the distinction of being buried in the Abbey than that he was the son of the Usher of the Black Rod, Daily Waiter in Ordinary to that monarch.

The second alternative site for a Sacristy is now temporarily used as a builders' yard. Approach to it would be by the public pathway which leads to the south transept. The site is of an irregular shape, enclosed between St. Edmund's Chapel, the south transept, and one of the buttresses of the Chapter House. It would be necessary to erect a wall joining this buttress to a buttress of the south transept, and in this wall would be the entrance-door and windows of the Sacristy, which would have a flat roof below the level of the windows of St. Edmund's Chapel and the transept. The area of the Sacristy as here proposed would be 48 feet by an average of 15 feet, excluding the cloak-room and lavatory, and several large recesses which could be fitted with chests or wardrobes. This room is, of course, much smaller than the underground Sacristy above suggested, but it may be said in its favour that it provides a useful space, it is entirely inconspicuous, and it would be very economical to construct.

In order that there may be covered approach to the Abbey from the Sacristy, without it being necessary to pierce a new doorway and disturb a monument in Poets' Corner, it is proposed to provide a porch or lobby containing both the door to the Sacristy and the existing door to the south transept. The latter entrance at present has an ugly wooden screen to protect it from draught. As this would be within a porch, the screen might be removed, and the external doors placed at the approach to the lobby from the pathway. It is realized that this second solution is in the nature of a makeshift, but it would surely provide relief, and might even prove useful as a supplement to the underground Sacristy, should it be considered desirable to store part of the vestments in a separate place.

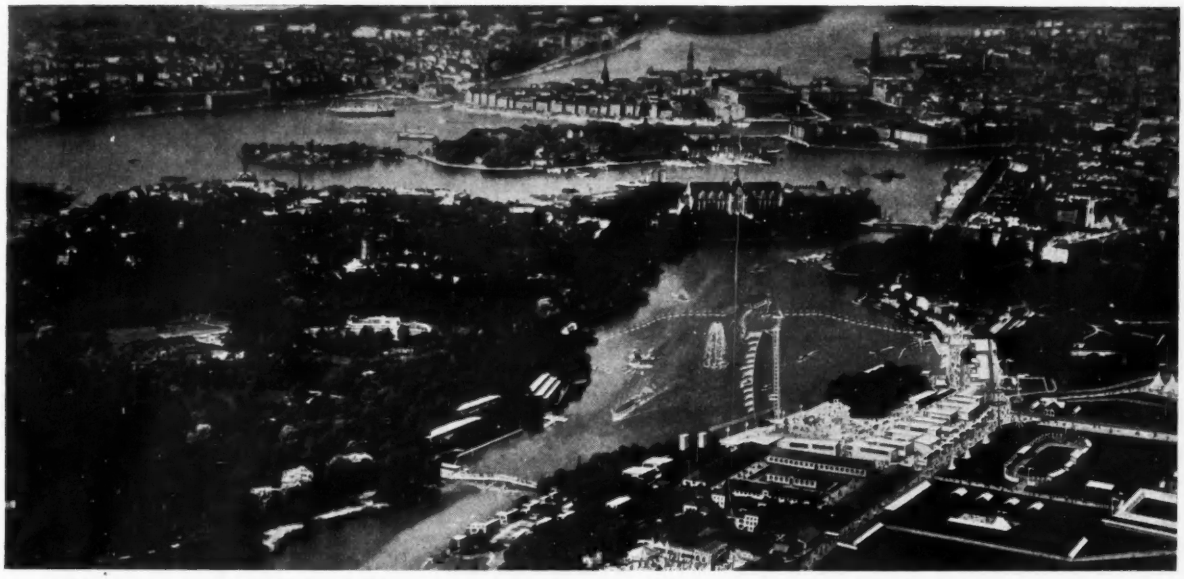


ENGLISH PRECEDENT No. 92

ENTRANCE DOORWAY, LANDOR HOUSE, WARWICK

This charming composition is now the entrance to the King's High School for Girls, and has a bold stone doorway of typical Early Georgian type.

The fanlight tracery shows Dutch influence strongly. The arch of wrought iron, with its fine lines, and the very simple railings, are very effective. —[C. M. C. ARMSTRONG.]



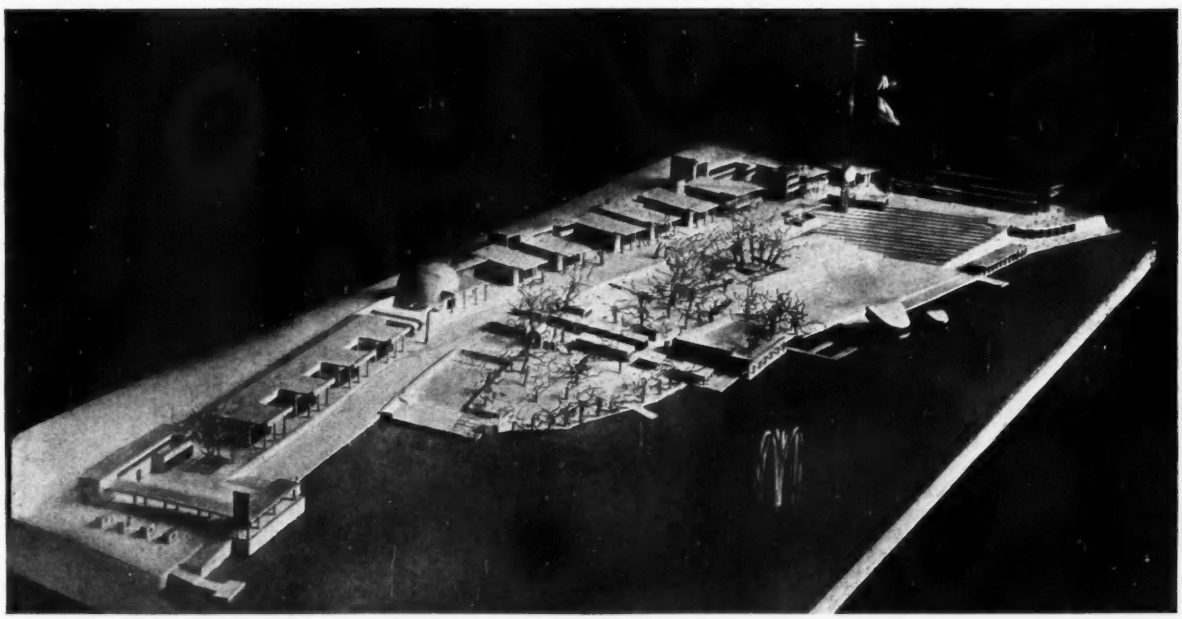
A bird's-eye view of Stockholm, looking westwards, with the exhibition grounds indicated in the foreground to the right. They are part of the Djurgaard, or deer park, formerly a Royal possession, that gives its name to this inlet of the Baltic.

STOCKHOLM EXHIBITION

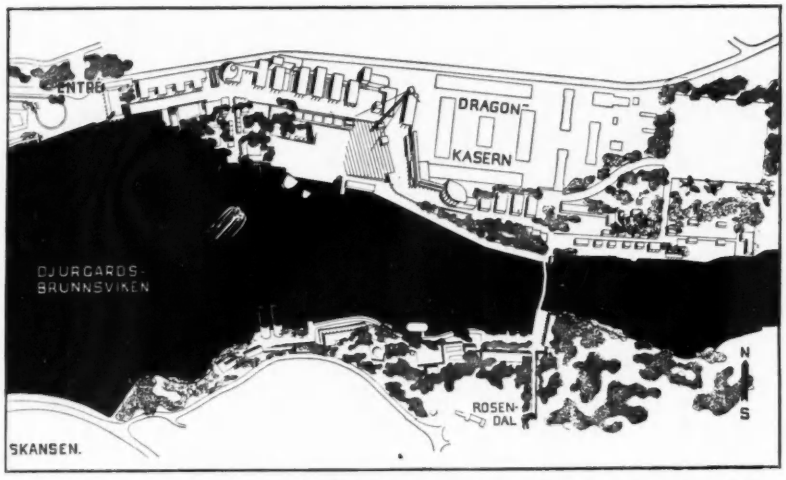
E. G. Asplund: 1930 *: Architect*

BY GUSTAF NÄSSTRÖM

THE last great Exhibition in Sweden before the war, the Baltic Exhibition, held in Malmö in 1914, brought with it a painful débâcle for Swedish industrial art. Thereupon the Swedish Slöjd Society put out a big and practical effort to further the art industries of the country. This Society, which had been in existence seventy years, underwent a swift rejuvenating process, revised its statutes, and set itself deliberately the task of ennobling the character of the Swedish manual and industrial arts and at the same time of improving the general standard of taste. In order to bring about a close and effective co-operation between craftsmen on the one



Photographic view of a model of the main exhibition buildings on the northern shore of the inlet, looking eastwards. Opposite the domed planetarium stretches the waterside park with, adjacent, a large open space capable of seating 10,000 spectators, and intended to be used for pageants, etc. The steel mast and the principal restaurant are seen beyond.



Plan of the exhibition area. Reading from the entrance, on the north bank, which is near the fashionable "Diplomat City" quarter of Stockholm, are seen main exhibition buildings, restaurant, dance hall (below the Dragon-Kasern, or dragoon barracks) and buildings devoted to domestic architecture, etc. On the south bank are the wooded heights of Skansen, and lesser buildings.

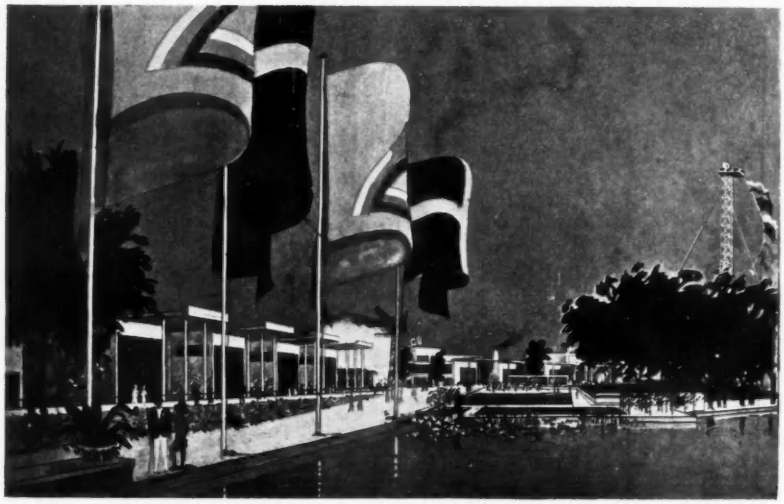
hand and industrial enterprises on the other, the Society instituted that same year a bureau to act as intermediary between them.

This move met with remarkably wide sympathy on the part of the industries, and by 1917 the Society was in a position to inaugurate a great exhibition of home equipment of a simple kind, which in many instances became models for subsequent manufacture. Since 1917, however, there has arisen a tendency among artists to set aside the simple types—*vackrare vardagsvaran*, literally "more beautiful everyday-wares"—in favour of furniture, glass and pottery, more out of the way and more luxuriously designed. Such a tendency is explained easily enough from the standpoint of individual artists, but it has had a weakening effect upon the Swedish Slöjd Society's endeavour to promote the artistic production of everyday wares. With clear understanding of the difficult situation thus caused, the directorate of the Society have now set about the conduct of propaganda in favour of rationally designed articles, and this effort is being concentrated in the great national Stockholm Exhibition of 1930.

The managing director of the Swedish Slöjd Society, Dr. Gregor Paulsson, in a public address, has pointed out that the period has at last come to an end when people believed that "an artist must design every door-latch, every fitting, every window-curtain, every chair," and thus turn every human habitation into a work of art. This conception, he declares, is not merely untimely but actually nonsensical, for "it is as futile to talk about artistic furnishing of the home in the case of 99 per cent. of the members of society as it would be to advise them to take a rest cure on the Riviera." Instead, the endeavour will be for "good quality and, in respect to the great mass of objects of daily use, for designs which are good and practical, whether these designs be the work of a professional artist or not."

Mr. Erik Gunnar Asplund, one of the foremost representatives of modern Swedish architecture, has been appointed chief architect of the Exhibition. With a little exaggeration one might almost say that the Swedish architecture of the last decade, especially in Stockholm, has been of the school of Asplund. To him—and to Ivar Tengbom also—may be traced the classicist tendency which set in after what we call the national and historical and romantic order of architecture. Its most brilliant expression may be seen in Ragnar Ostberg's Town Hall of Stockholm, a building which has appealed not least to Englishmen. Asplund's classicism may be best described perhaps as a severely restrained neo-antique with a clear, bold massiveness and a restricted but meticulous ornamentation. Asplund's masterpiece down to the present is the State Library in Stockholm, a northern equivalent of the Castello Sant' Angelo. The first designs for this Library date from 1923. Not until the spring of 1928 was the building opened. In the interim a great deal had happened. The *Bauhaus* of Dessau had come into existence, Le Corbusier's aphoristic propaganda had begun to penetrate into people's minds, and the exhibition of dwelling-houses at Stuttgart had won victory for the principle of "functionalistic construction."

Asplund has by no means remained uninfluenced by these phenomena. On the occasion of the opening of the Library, I asked him whether he was satisfied with his work. He made no direct answer, but confided to me that if he had to begin it all over again he would construct it quite differently. At the nature of his conception at that moment one can guess from the terrace building which was laid down in the previous year beneath the façades of the Library. It is a very simple construction in concrete, iron, and glass, and displays the tendency, typical of functionalistic architecture, to allow the concrete wall apparently only to



The water front of the exhibition; a sketch showing how the shop-window idea, which dominates the laying out of the present enterprise, is put into practice. The buildings, on the side overlooking the water, provide a series of huge shop-fronts, with large shelters overhead, extending across the main avenue or street on which they face. At a lower level is a terrace surmounting a sunk garden.

rest on the window-panes, behind which the supporting structure is concealed. In these entirely unornamented rows of shops may be seen a prototype of the methods adopted by Asplund in his Exhibition architecture, a complex of giant shop windows.

This arrangement involves nothing less than a revolution in Swedish Exhibition methods. Bygone visitors have wandered about among semi-Oriental palaces and neo-antique temple courtyards, which concealed very unpretentious interiors behind their columns and their stucco ornamentations. Such Exhibitions have naturally had the effect of tempting people to prefer a *dolce far niente* existence outside to improving their minds in the sweltering atmosphere of the half-empty halls.

What will be seen instead will be a street along which the different halls will open out with enormous glass walls looking towards the south, with masses of flowers and shrubberies along the waterside. The street derives its rhythm from the porticoes with plain rounded columns which support the roofs over the projecting portions of the halls. The architect aims also at producing a certain colour-effect against the uniform shade of the walls by means of creepers, small gardens, polychromatic tents and signposts. And when darkness sets in, the street, like the entire Exhibition, will be lit up by electricity.

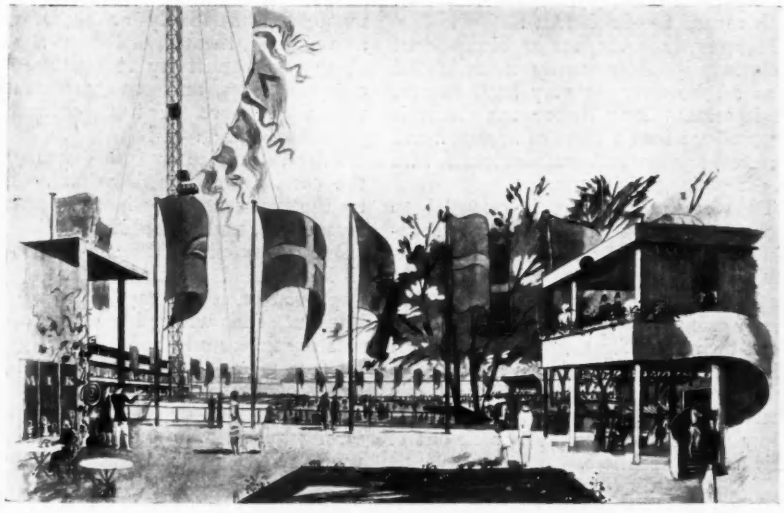
The outstanding and dominant feature in Asplund's plan is the consistent way in which he utilizes the possibilities of the site, which lies on both shores of the *Djurgaards-brunnsvik*. Like a modern Thales, Asplund has taken this expanse of water as the core of his creation. All the buildings face it, and as in days of yore, the water becomes not an isolating but a uniting element. A wooden bridge is thrown over it at its narrowest point; in the centre of the water there will be a fountain, illuminated in the evening by many coloured streams of light; an open swimming bath with diving-boards and galleries is moored out on the water; a floating concert platform will glide along the shores; perhaps, also, an "Island of the Blest" will rise up out of the waves—a sacrifice, it may be agreed, from the standpoint of functionalism, to the vanishing Romanticism of the nineteenth century, or perhaps a barefaced attempt to please the public. Asplund sees the thing from the latter point of view. As a matter of fact, he is as unwilling as any other ambitious Swedish architect just at present to be classed with the Romanticists. His task, as he conceives it, is at the lowest possible cost to construct a framework round the actual exhibits which will surprise and interest and please.



Imaginative sketch of the view from the large open space by the waterside, provided for festival purposes, towards the east end of the street of shops, showing the principal restaurant and the steel tower, with a modern three-roomed flat at its height. This lattice-girder tower, 260 ft. high, is conceived as a monument to Sweden's seven-centuries-old iron industry.

The principal restaurant will occupy an extremely attractive site by the waterside, and from its open terraces, arranged amphitheatre-fashion, every visitor will have an uninterrupted view over the whole length of the inlet with the City's islands afar off.

The whole Exhibition resembles a pleasant summer-town made up almost altogether of flowers and glittering water and majestically waving flags. Along the great street of shops, with its immense windows and protective awnings, runs a *corso*, with gardens and shrubberies to tempt visitors to rest and amuse themselves. But in the midst of these idyllic surroundings stands the Swedish Slöjd Society, with its determination to ennoble taste, standardize wares, lower the costs of production, and teach people to construct for themselves homes adapted to the times. As a symbol of this determination, if you like so to regard it, there stands out on the Place a gigantic iron structure over 250 feet in height, on the summit of which will be found a modern three-roomed flat with "functionalized" furniture; and its gentle swinging to and fro will make Swedes accustomed to life in sky-scrapers.



The aspect presented to a spectator standing among the eastern group of buildings, and looking towards the restaurant (on the left), mast, and open space. In the background is the Djurgaards-brunnsvik, the inlet of the Baltic on whose banks the exhibition grounds are situated, with, beyond, the wooded heights of Skansen. A wooden bridge spans the inlet at its narrowest width.

THE ARCHITECT

His Beginnings and Ends

A SELF-PORTRAIT BY CLOUGH WILLIAMS-ELLIS

In the following extract from his autobiography, published in book form by Geoffrey Bles, which concludes the series of three, published weekly in these pages, the author reflects upon the relationship between architect and client.

iii: Daily Bread

PROBABLY I can only be reasonably intelligible to anyone as a person when it has been explained to them that I am an architect. I am, however, so much more that than anything else, and so steadily orientated in that one direction, that the fact is probably fairly quickly deduced from what I say and notice and do, and I am no doubt indulged accordingly.

But whatever else an architect may be or do, the great central fact of his life is of course the practice of his chosen profession, about which I might perhaps say something a little more specific.

When you begin practice you are inclined to marvel at being actually rewarded for enjoying yourself so hugely at somebody else's cost—all the fun of planning and arranging and seeing one's dreams come true—and nothing whatever to pay!

Then you come to realize that it isn't *all* fun. There are occasional worries and perpetual responsibility. Sometimes builders are incompetent or dilatory, or clients unreasonable. Worst of all, you may find you have done something stupid yourself, or overlooked some important instruction or detail.

But the rule being that all goes merrily, an exception now and again, in some particular, cannot seriously perturb you; and besides, dealing successfully with an awkward situation, whether practical or psychological, is very much part of the job, and by no means the dullest part either.

I will frankly confess that there *are* dull parts even of architecture—or at any rate parts that are less interesting than others.

Drains, for instance. I am virtuously conscientious about drains, but I cannot find them amusing. I do grudge, too, the amount of good money that one is forced to bury underground with nothing at all to show for it but a clean sanitary certificate!

Sometimes the most interesting thing about a job is the client. Sometimes, however, he or she scarcely exists, and I have suspected that the building or decorating was determined upon in an endeavour to attain to some feeling of reality—as a background to give their shadowy personality some degree of substance in a world otherwise oblivious of their dim existence.

Occasionally husbands seek to divert their wives by encouraging or at least permitting them to call in an architect to amuse them with schemes for a new house or garden, for rebuilding or reconditioning, or for new furniture or decorations.

The husband is probably rich and indulgent; the wife perhaps idle, vain and foolish; and on top of all, at a critical period in her life that explains, poor thing, why the husband is ready to agree to almost anything if the wife can only be kept happily distracted.

Many architects must have experienced the kind of thing I am referring to, but never have I heard it confessed to nor seen it admitted in print. Yet it is a real problem which the young architect should be prepared for—to face or to flee.

I recall my own experiences with groans. Had I been wiser I might have guessed how things were, and, guessing it, nothing on earth would have induced me to involve myself in such impossible situations.

After all, you can always be too busy or too expensive or too something, and so get out of an uncongenial job without being actually rude; that is, if you can recognize it as likely to be harassing in advance. But the only advice I can really give to the young architect in this regard is—Look Out!

Happily, however, the architect-client relationship is generally a delightful one as, however he may have begun, it is seldom long before the client is worked up into a state of architectural interest and enthusiasm that makes him a congenial collaborator.

That state of things is essential to complete success—to get a really satisfactory building its two parents, architect and client, must work harmoniously together. The architect's part has been often enough set forth; but there is a technique for the client, too, that deserves more attention than it gets. He, too, needs to consider how he can best fit himself for his rôle as employer—how get the best possible work out of his chosen architect.

If the mistress of a house is ill-served, her friends will not be inclined wholly to blame the servant situation. There is an art in employing: the first step in such an art is to consider what exactly is the task for which you are getting the services of Mr. B. or Miss C. It is impossible to serve somebody who does not know what it is they want of you.

True, it is one of the duties of the architect to help his client to make up his mind: but the architect cannot, from the nature of things, make up a vacuum. There have to be at any rate certain alternatives in the client's mind, among which the architect can choose. For instance, it is the client's and not the architect's job to decide what mode of life the house which is to be built must fit; what kind of business (expanding, contracting, stationary), the business premises must accommodate. To the client, again, falls the duty of deciding how much is to be spent, and how much is to be included in that sum; as for example, in the case of a dwelling, approaches, terrace, water-supply, drainage, outbuildings, and so on.

Again, clients have been known to build a house to their own peculiar needs with, say, a studio, an outdoor room, or a ground-floor room for an invalid; and then to change their minds about living in the house, and want to sell it, and be sad because the house does not meet orthodox requirements more exactly. It is often, under modern conditions, the same with a factory or office building, or with a place of amusement that may be wanted, alternatively or successively, as a cinema, theatre, or lecture-room.

The client must try to eliminate incompatibilities, and present the architect with more or less reconcilable demands. Then it is the job of the architect to seize on the essentials of the case, and reconcile what seem to be the basic *desiderata* into a practical, reasonable, and articulate whole.

One of my clients definitely said that if he wanted something that I disapproved of, it was my job to educate him out of his wrong ideas, and that it was my fault and not his if in the end he (the client) had his own way and the rooms turned out too small, the ceiling too low, or the radiator in the wrong place. He considered that it was my business to know his mind better than he knew it himself.

But actually, as it works out in practice, this idea of my client would lead to a great deal of dissension. He was a Scotchman, and so probably an Absolutist and a Perfectionist, with an idea that there was one place in every

room designed by Heaven for the radiator, and that to put it in any other place would be as definitely wrong as to put it in that place was definitely right. In fact, the rightness or wrongness of the place of the radiator is often not absolute at all, but entirely relative to the feelings, even to the harmless fads, of that particular client. In most cases, in fact, it conduces very much to the ultimate success of a building if the client will use his imagination and visualize the business that is to be transacted there or the lives that are to be led.

The client should never be ashamed of confessing ignorance to the architect. It is quite possible for a very absurd relationship to grow up between them, in which the architect tries to appear all-wise to the client, and the client tries to appear much more knowing than he really is to the architect. The consequence of bluff on either side or both sides is often a building which is extremely surprising to the client, and displeasure on the part of the client which is equally surprising to the architect.

It should be remembered that an architect can rarely give complete and absorbed attention to a job if he has a naturally interested, inquiring, and sometimes agitated client trotting round at his heels. The architect will want to go round alone or with an obedient foreman who does not speak until spoken to—the sort of consultation that a doctor has with the nurse who is looking after the case for him. They will want their private consultations too, and freedom to debate on technicalities that the presence of a layman would impede.

Perhaps there may be half a dozen expedients for getting over or round some awkward little structural emergency. Architect and foreman, in the free solitude of the scaffolding, will perhaps cap each other's proposals with fresh ingenuities, until the right solution seems to have been found. Such contact will be exhilarating for both of them. What architect has not often had such a sharply pleasurable battle of wits? Few of us can have had such contests where an experienced foreman has not from time to time been victorious. But if the client had been there, the more experienced the foreman the more he would have been apt to keep respectfully silent, and merely await the oracular pronouncements of his superior officer, with his notebook and pencil in hand and a subservient "Very good, sir" on his lips.

Even if the architect does not in the least want to impose himself upon the client as a man of instant and infallible decisions, he may think, rightly or wrongly, that the client does expect him to be a know-all, and it is very easy to play up to a client's foolishness in that respect—in fact it is very difficult not to do so. But in fact, what architect has not been quietly button-holed by the foreman after a tour round with his client, with some such speech as this?—

"I didn't of course like to say anything in front of Mr. Peppercorn, but about that girder. . . . I expect you forgot that the flue from the boiler comes up nine inches from the north side of the pantry window, so you can't fix it like you said. . . . How would it be if we cast a reinforced concrete slab *in situ*, got a bearing off the chimney-breast set off, and let that carry the whole thing?"

And here a word about foremen. In the present writer's experience, and in that of most other architects with whom he has discussed the matter, general foremen appear to be a race entirely superior to the rest of humanity. They are, as a rule, zealous, extremely versatile, possessed of infinite resource and extraordinary impartiality and probity. Virtually, the foreman is serving two if not three masters—the contractor who employs him, the client, and the architect. Builders' foremen seem to have a self-effacingness unusual in self-made men, organising ability, retentive memories, and a pride in their work. Incidentally, the client does not always recognize the services of a good foreman. He is really rather like a *chef-d'hôtel* with whom his patron has been on friendly and human terms and who has done him some rather arduous and notable service, and should be similarly acknowledged by an appropriate present.

So much for the client's side of the partnership. Now let me present an imaginary picture of the planning of a home, of the kind of considerations that affect it, and, very roughly and briefly, of the sort of way in which the architect gets going.

Let us imagine that the parents are conspiring together at the birthplace of their offspring-to-be, and that this is the hour of its conception. What pre-natal influences will determine its form and character until it shall stand forth complete?

The architect thinks aloud: "We are being confronted with a chosen site for the first time, by a client who has been so bold as to buy it out of hand without our previous advice and approval. We are merely here to make the best of it." Very well.

We see a certain area of land of a certain configuration, with possibly a variety of natural and artificial features either on or near it. It is roughly a square of about an acre, with a by-lane running along its northern side, from which it slopes away quite markedly.

Good—we will hug the lane (the traffic on it is negligible), so that we may exploit the land to its full extent, with a southward sloping garden on the other side of the house. So, too, shall we be able to keep our sewage outfall at the end of the drain down the slope at a maximum distance from the house. So, again, shall we be saved all drive making and unprofitable garden making on the northern and exposed side of the house.

We will merely set the house back just far enough to turn a car in front of its door, making full use of the width of the lane.

There happen to be a couple of fine old oak trees in the existing hedge along the lane, and we site our house, not centrally on the plot, but symmetrically between them, so that their spreading heads give the house an acceptable frame from whichever side it is viewed.

We do this the more readily because this pushes the house along to the east—so leaving more garden at the western end, where we intend to place the main sitting-room.

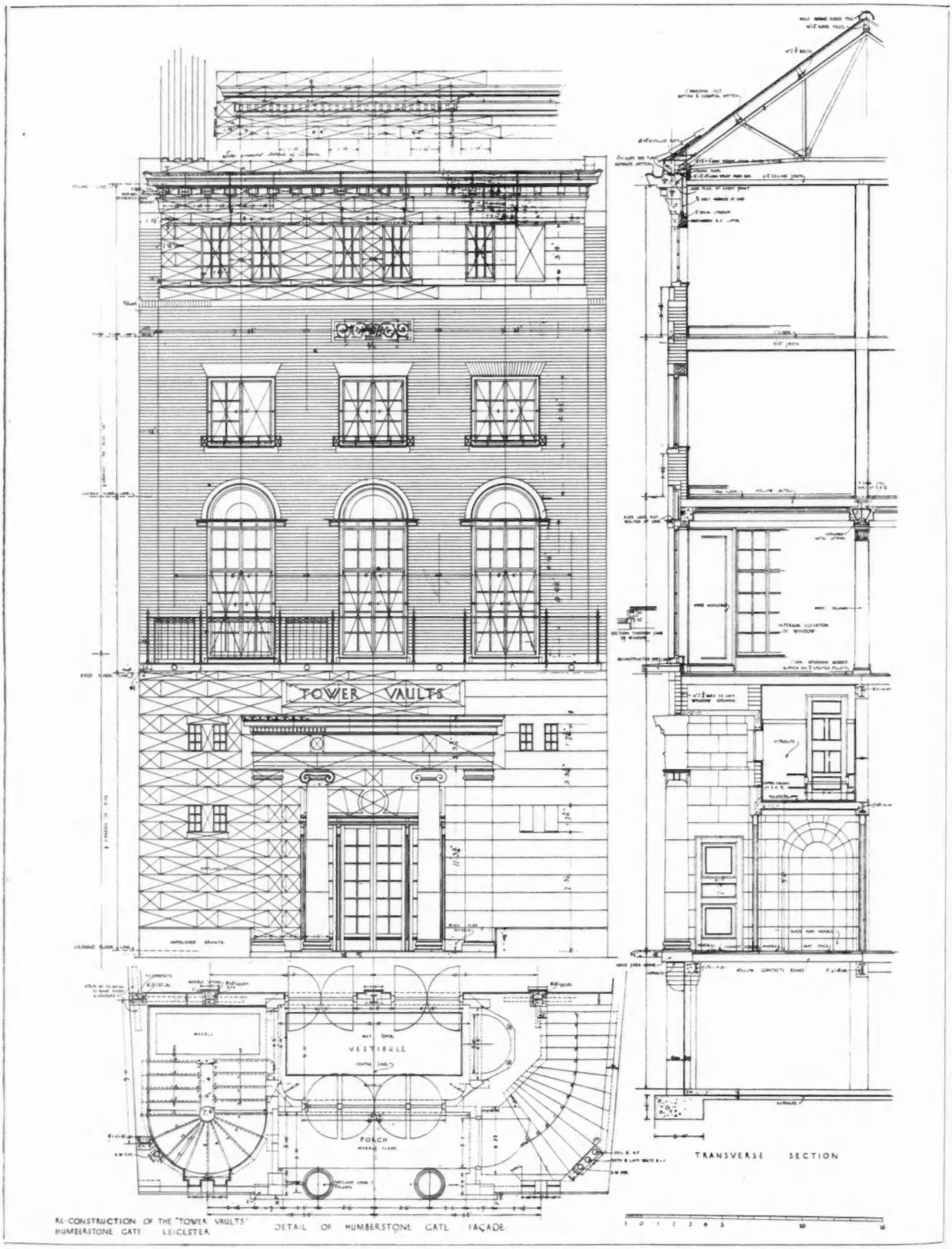
Hard up in the near corner of the adjoining plot to the east is a rather poisonous little bungalow, acting as lodge to a villa farther back from the road, happily hidden by its attendant Wellingtonias. We particularly desire to be spared all view or unnecessary consciousness of our neighbour and all his works; so we plan our neat garage and engine-house close up against this bungalow, so that it is quite masked from our forecourt.

Not very neighbourly, perhaps; and we therefore rather nobly offer him the alternative of reconstructing the exterior of his lodge—an offer, however, that he rejects with indignation, as he chose it himself from plans submitted by the most reputable local contractors, and he still thinks it very stylish.

We decide to take the sting out of his fancy conifers by a double line of limes along our western boundary that we shall probably pleach into a tall alley, with perhaps a little garden-house or belvedere at its bottom end, overlooking the pond and the low-lying ground that is liable to winter flooding, and, with the racecourse beyond, we reckon to be safe from development and likely to remain an open meadow for ever.

Our next-door neighbour is a retired bookmaker who built himself his all-too-appropriate home from the plans of an estate agent's surveyor in the nineties, so that we must seek for such local building tradition as the place may seem to offer elsewhere. As a matter of fact, the half-dozen or so old cottages and the "Duke of Cumberland" that front the lane where it joins the high road have cob and wattle and dab walls and rye straw thatch.

(*Concluded on page 883.*)



Tower Vaults, Leicester.] [*By Stockdale Harrison and Sons.*

The architects' detailed drawing of part of the main front, illustrated, photographically, on the facing page. Though the width is only 30 ft., the building has basement, ground, mezzanine and three upper floors, the top being devoted to bedrooms and other domestic quarters. It is served by three lifts, is of brick, partially stone-faced, and has a tiled roof and metal casement windows.

Our new house will be clearly seen over and beyond this group, as one comes down the hill from the station, and we must try to play a worthy and not inharmonious part in the tableau.

Wattle and dab or earth walls are out of the question for the sort of house we contemplate, but we can colour-wash our brick walls just that faded apricot colour that so admirably sets off the mouse-coloured thatch of the village; and our own roof can well be of thatch too, but of the Norfolk or Hampshire reed, to minimise the cost of upkeep.

This soft-contoured, soft-coloured hump of thatch will look very well, too, from the garden, echoing as it does the swelling uplands of the bare down, at whose foot our little lane meanders along so pleasantly.

But there are other influences at work affecting the final issue—all to be apprehended by the architect and skilfully exploited in his plans.

For instance, what of the climate, winter and summer? What of the client's habits and prospects, his tastes and resources? What, above all, of his wife and *her* attitude to a hundred and one different questions? Occasionally the architect finds himself in the invidious position of having to choose between husband and wife where their views diverge, deciding that he or she has, on the whole, the sounder ideas, thereafter doing all he can to manœuvre the approved one into the position of client-in-chief, and doing all possible to coax the other one into the rôle of approving chorus.

This imposing of discipline on clients for their own ultimate good is obviously a matter requiring some delicacy and considerable lightness of touch; and it is over such psychological problems that otherwise competent architects sometimes come to grief.

Unfortunately, on the other hand, an excellent psychologist and tactician may be but an indifferent architect, whose most skilful "suggestion" will not suffice to persuade his disillusioned clients that they have got what they were led to expect, or that they have been well served. The incompetent yet plausible architect is not, however, likely to flourish for long; and as architects are generally chosen on account of past performances and the recommendations of previous clients, we need not perhaps waste much pity on those who have rashly involved themselves with a charlatan through not making reasonable inquiries.

There are quite enough architects of proved talent and integrity to carry out with due care and attention all that is likely to be asked of them, and it behoves the would-be employer to acquaint himself with their names and records. If he neglects to do this, he must blame himself and not the architectural profession if he gets "let down."

The worst of being judged by past performance is, from the architect's point of view, that he is in danger of being forced from time to time into rather too narrow channels. Never did I wish or expect to find myself in a specialist's groove, yet, for all that, I have not succeeded in avoiding it altogether.

To begin with, I thought I should never do anything but cheap cottages, which, valuable in the discipline and economy that they imposed, were not very satisfying to one's architectural cravings.

Next came the phase of "Lesser Country Houses," rectories, suburban villas, holiday cottages and the like—more opportunities, more variety, more fees, but still all within a rather limited ambit.

Thereafter the annual "bag" became increasingly various, the individual items generally more important and rewarding, until, on its domestic side at least, there are now few architectural problems which at one time or another I have not had to face.

Yet with all this variety I seem none the less to have developed a somewhat special line—the alteration, conversion or rebuilding of large town or country houses, often for some new purpose, such as a school or college, a club, an hotel, a hospital, or whatever.

Stowe and Ashridge are typical country examples, whilst Dartmouth House and the new Ladies' Carlton Club show two great town houses of the *ancien régime* modernized and converted to new and communal uses.

More often, of course, one finds oneself altering and reconditioning old country houses for renewed service in their traditional capacity, and if the subject is at all architecturally distinguished, such rehabilitation can be extremely interesting. Bolesworth Castle, Oare House, and Llangoed Castle were notably satisfying exercises in this kind.

Such jobs, however, sometimes involve little new designing of a strictly architectural kind, and one must get one's interest and satisfaction more from such ingenious shifts and wanglings as an economical and acceptable re-planning may demand, rather than from devising noble proportions or entertaining details.

If work of this kind does not exercise one's highest æsthetic faculties, it yet gives unlimited scope for certain cunning, and the kind of ingenuity that results from a chequered experience in the world of structural and administrative jigsaw puzzles. Not the architectural *beau-monde* certainly, but a world amusing enough for all that, where the rewards are by no means despicable.

(Concluded.)

TOWER VAULTS, LEICESTER

DESIGNED
BY
STOCKDALE HARRISON AND SONS



The narrow, tall front to Humberstone Gate is in brick and Portland stone.

THIS is a rebuilding job of licensed premises, chiefly used for refreshment purposes, in which the best had to be made of an awkward site, running back about 60 ft. from a frontage of only 30 ft. to Humberstone Gate, one of Leicester's busiest thoroughfares. Six floors were, however, available, counting the basement, used as stores, and the mezzanine, introduced to give loftiness to the public bar and refreshment buffet, and to provide further storage space, etc.

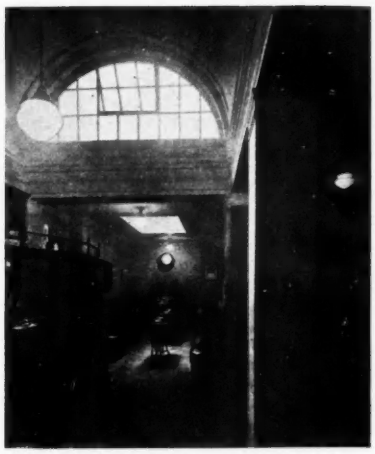
To encroach as little as possible on the available floor-space, the main stairs



A corner of the vestibule, with stairs leading down to the basement, and up to the restaurant.

have been compactly planned, being taken up to the first floor in a well to the side of the entrance, lit by small windows that come pleasantly in the elevation. For similar reasons, the second floor becomes a kind of liaison between the restaurant on the first, and the living quarters on the third; here, in fact, is the kitchen, which serves both. Problems of access are lessened by the provision of three lifts, one for passengers and two for goods.

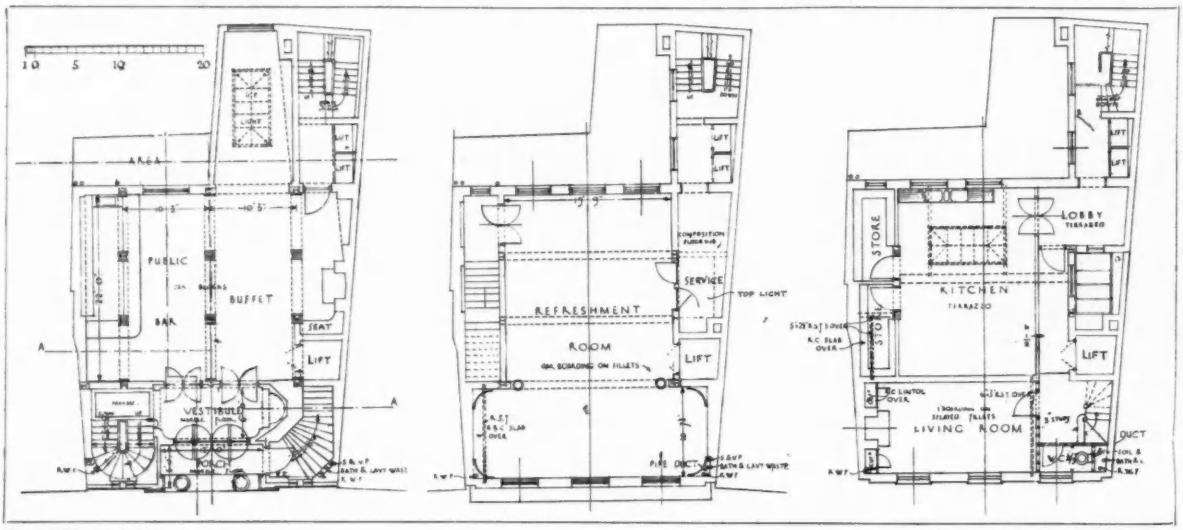
The main structure is of brick, with a tiled roof, but the front is partly faced with Portland stone, which is also employed for the vestibule, together with marble. The refreshment buffet has a barrelled ceiling, lit from the end, and, in addition, a skylight. Ample room has been given to retiring rooms; extensive use is made of patent flooring; and the building is centrally heated.



The refreshment buffet, on the ground floor. Like the public bar, it rises through the mezzanine.



In the restaurant, on the first floor, looking towards the main front. The entrance doorway (not shown) is in the wall on right.



Tower Vaults, Leicester.] [*By Stockdale Harrison & Sons.*

Plans of the ground, first, and second floors. The site was a difficult one, and stair space has been economised. To give a reasonable size to the restaurant, which was the most important room to be considered on the first floor, the kitchen has been planned above it.

LITERATURE

THE HONEYWOOD FILE

WHETHER or no a careful study of *The Honeywood File* will enable an architectural student to pass the Professional Practice Examination of the R.I.B.A., it will certainly be a most useful guide to the young, and possibly the older, architect; and most suggestive for clients, to whom possibly an anonymously sent copy might often find its way with advantage. The book reads, in fact, almost as a play rather than as a series of letters, and the characters of the actors are admirably portrayed. It is a comedy, with moments of threatened tragedy, in which all ends happily before the hinted catastrophe really takes place, and one is left wondering what will, in fact, happen to the paint about which the weak client has at the last asserted himself.

The history of the building of Sir Leslie Brash's house, vividly told in these letters, which cleverly pick up and weave the threads as they go along, is obviously meant as a warning against too much letter-writing as a matter of practice, in spite of their being used for the presentation of the story. It is a very wise warning, too, though an architect can hardly be expected to correspond with his client quite as Pud and Tinge correspond with Spinlove.

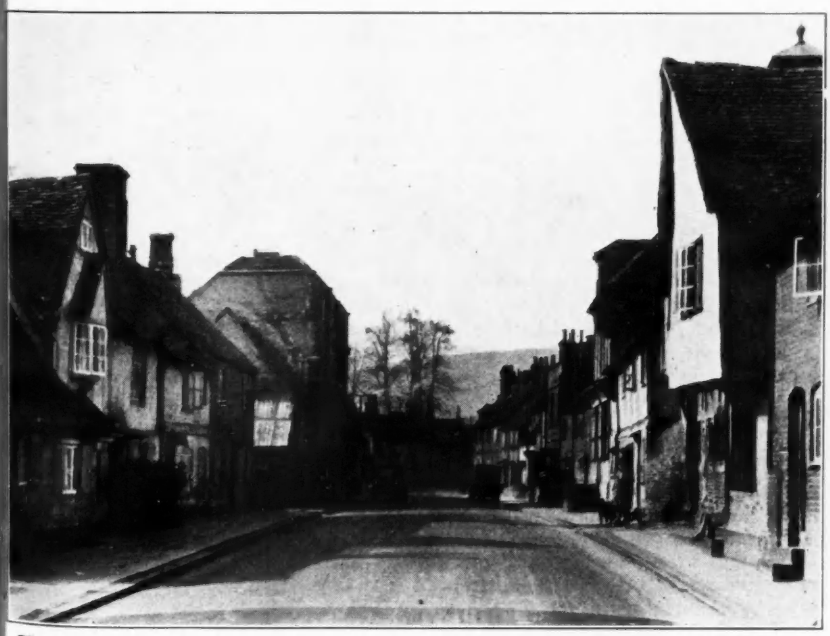
The earnest young architect, the good-hearted but uneducated and pompous client, the really decent and helpful builder, and the foreman Bloggs, are all characters that often come on the stage. Another more or less inevitable character in an architect's life is Lady Brash, but Spinlove is fortunate in not having her to deal with directly, except in one wild interlude when she takes control. It is more than likely that he may have to deal with her type without a buffer, and then will come a testing time. The one almost inconceivable type in the book is Potch, the local surveyor. Most of us have luckily never met him, and none will ever wish to.

Mr. Creswell's comments are racy. They poke sly fun at all these people, and are properly scathing at times. His stress on the value of humour and of a reasonable interpretation of documents and human relationships strike one as being very helpful, but, while he has filled his pages with good advice and provided a very full catalogue of pitfalls as a warning, much must depend upon human nature, and a man must have the root of the matter in him if he is to deal wisely with every difficulty that arises, however carefully he has been prepared and coached.

The comments that foot the letters are full of wise things to be noted by architects, clients, builders, and others, and if the publication of *The Honeywood File* in book form conduces to their readier realization of one another's problems, it will have served a useful purpose besides providing very welcome entertainment.

PERCY S. WORTHINGTON

The Honeywood File. By H. B. Creswell. The Architectural Press. Price 7s. 6d. net.



The village street, West Wycombe. [*See book review on* An Appeal to the County of Buckingham and England.]

PRESERVATION OF WEST WYCOMBE

The Royal Society of Arts has issued a booklet, entitled *An Appeal to the County of Buckingham and England*, in connection with the preservation of West Wycombe.

This charming village, which is still a live centre of the chair industry, was acquired by the Society in March last. The purchase price was £13,000, of which sum £6,000 is still needed.

Sir John Dashwood, the owner of the historic seat and properties adjoining the village, intended, it will be remembered, to offer West Wycombe for sale at a public auction. Negotiations were at once set on foot with the owner by the Society to purchase the village privately. A week before the sale the Society was approached by a local resident, who offered a sum of money towards the cost of saving it. Thus the Society was able to purchase at an exceedingly low price—considerably less than would have been obtained by public auction.

Although the Society has prevented what would have been disastrous to the beauty and to the structural unity of the village, it must be realized, nevertheless, that "the responsibility of putting the buildings into sound condition is a serious one, and the Royal Society of Arts is anxious to do the necessary work as soon as possible. To meet all requirements of purchase and complete renovation, a sum of at least £20,000 is required. Will Buckinghamshire set an example to all the counties of England and respond to the appeal, so that there may be no delay in renewing the village under educated control?"

The Society has shown great enterprise in saving and preserving West Wycombe in its entirety. It is to be hoped, therefore, that the public will appreciate their splendid achievement, and help, as far as possible, in this preservation movement. K

An Appeal to the County of Buckingham and England. Royal Society of Arts.

A CHINESE COMPENDIUM

The China Architects' and Builders' Compendium for 1929 has reached its fifth year of publication. Since the last issue great strides have been made in the completion and construction of buildings, many of which had been held up until peace conditions became more settled.

In the spring of 1929 tenders were made to the municipal council for the purchase of its electricity works and the existing rights to supply current. The purchase is expected to be completed in the course of the next few months.

The China Architects' and Builders' Compendium, 1929. Edited by J. T. W. Brooke, A.R.I.B.A., and R. W. Davis. The North-China Daily News and Herald, Ltd.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

DURING the Committee stage of the Expiring Laws Continuance Bill, which prolongs the Rent Restrictions Acts for another year, Sir Kingsley Wood asked whether the Minister of Health could make any statement concerning the Government's intentions in regard to those Acts.

Mr. Greenwood regretted that he could make no considered statement on the matter as yet. The problem was a very complex one, and needed more consideration than the Government had so far been able to give it. It bristled with difficulties; there were wide divergences between the points of view of tenant and landlord, and questions of acute controversy were raised by it. While he was now doing his best to give a good deal of consideration to the whole question, it was impossible at that stage to say anything about the future intentions of the Government.

At question time Lieutenant-Commander Kenworthy asked the Secretary of State for War whether he could report any progress in the removal of the War Office sheds and other buildings in the vicinity of Stonehenge, which were visible from the circle; and if he was aware of the successful efforts by means of public subscriptions and the assistance of His Majesty's Office of Works to preserve the amenities of Stonehenge, and to remove unsightly buildings formerly belonging to private persons that were within sight of the circle.

Mr. Shaw said that continuous progress was being made in the removal of war-time hutted buildings in the neighbourhood of Stonehenge, which were surplus to peace-time requirements. But the military cantonment at Larkhill, which was within sight of Stonehenge, was required for the accommodation of artillery formations to which close proximity to the artillery ranges was essential. He was aware of the public interest which had been taken in preserving the amenities of Stonehenge, and care had been taken by the War Department in the siting of certain new buildings erected since the war to contribute to this.

Asked by several members whether he had received resolutions from various local authorities calling his attention to the difficulties they experienced in connection with caravans and other similar temporary dwellings; and, if so, whether he proposed to take any steps to assist them to overcome those difficulties, Mr. Greenwood said that his attention had been drawn to this matter, and he had received resolutions from a number of local authorities. He was advised that most at any rate of the trouble could be met if local authorities exercised more thoroughly and vigorously the powers which they now possessed, and he was not satisfied that further legislation was needed. He was always pleased to give local authorities what assistance he could if they consulted him on their particular difficulties.

Commander Bellairs asked the Minister of Health whether he had been able to form any estimate as to the working of the Smoke Abatement Act, 1926; whether he was satisfied that all local authorities were endeavouring to apply the powers they possessed under the Bill; in how many cases the Ministry had had to exercise its powers to compel the local authorities to make bylaws regulating the smoke nuisance; and whether he would consider the appointment of an independent committee to bring pressure on local authorities, and co-ordinate the work all over the country.

Mr. Greenwood said there was evidence in the Ministry of Health of increasing activity among local authorities generally in matters of smoke abatement. He could not, however, say that all authorities were making full use of their powers under the Act. There was room for more vigorous action, in consultation and co-operation with industry, the present difficulties of which undoubtedly have acted as a deterrent in some areas. So far, he had not seen fit to exercise the power of compelling authorities to make by-laws, and, as at present advised, he did not see any necessity for the appointment of such a Committee as was referred to in the last part of the question.

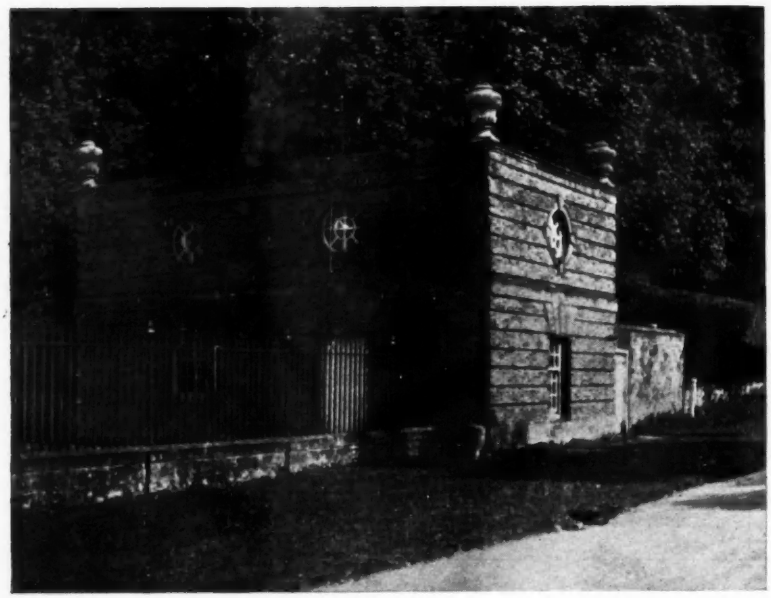
Mr. Greenwood informed Sir John Power that the average contract prices of parlour and non-parlour houses during October were: Parlour houses, £419; non-parlour houses, £344.

Mr. Wellock asked the Minister of Health if he would state the average area of parlour and non-parlour houses respectively, erected by local authorities during each month since May last.

Mr. Greenwood said that particulars as to the average area of houses erected during the months in question were not available, but the following statement showed the average area of parlour and non-parlour houses respectively (excluding flats), in contracts let by, or in direct labour schemes of, local authorities during each of these months:—

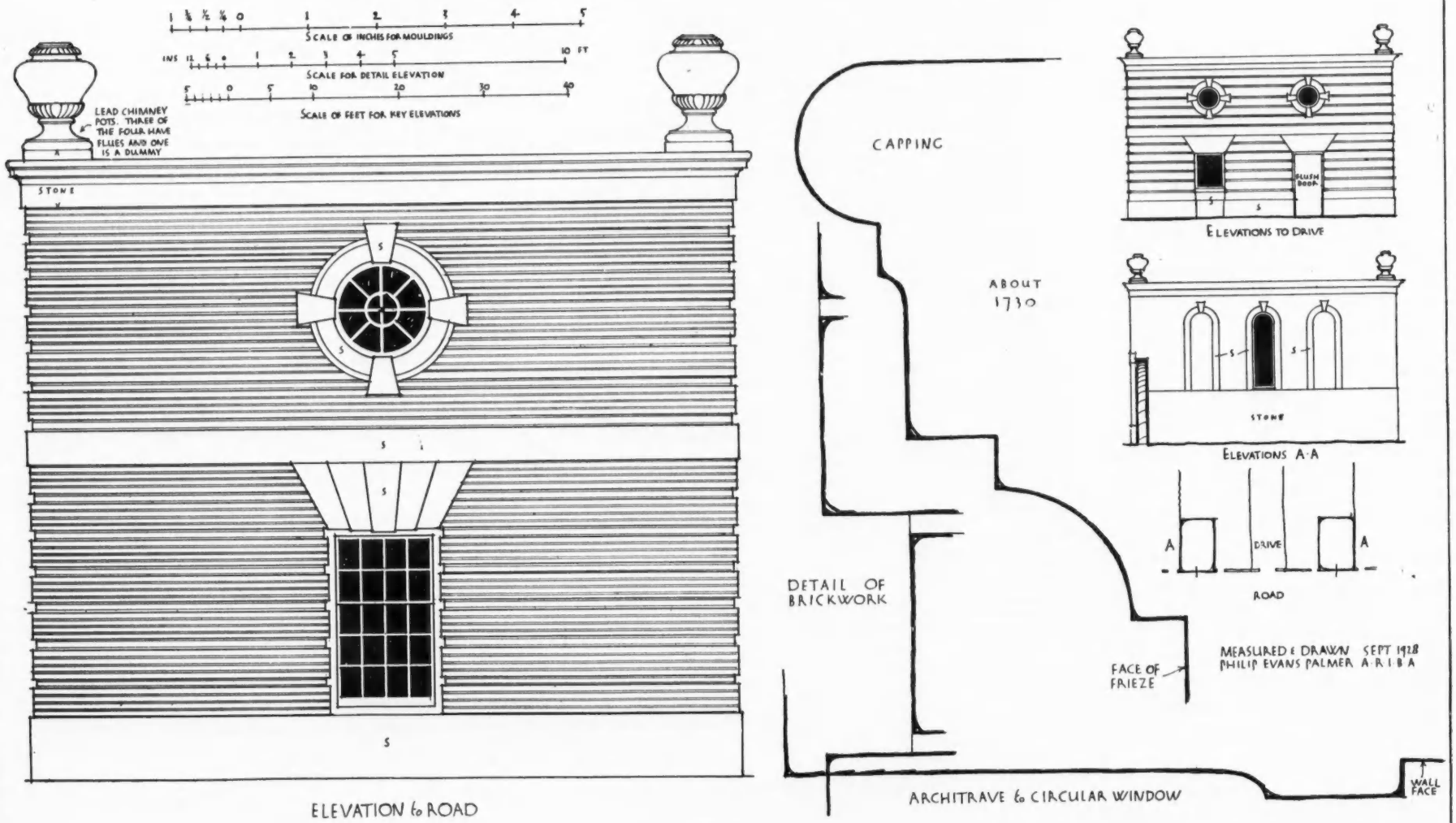
Month. 1929.	Parlour houses. sq. ft.	Non-parlour houses. sq. ft.
May ..	911	763
June ..	884	773
July ..	916	748
August ..	905	756
September	914	783
October ..	912	780

[*Continued on page 888.*



Entrance Lodge, Newburgh Priory, Yorks. This is one of two brick lodges built in 1732. The lodges flank the entrance gates to the Priory, the home of the Belasyse family since the suppression of the monasteries by Henry VIII.

Entrance Lodge, NEWBURGH PRIORY, Coxwold, Yorks.



A measured drawing of one of the two entrance lodges, Newburgh Priory, Yorks. The rusticated treatment of the brickwork of the lodges is exceedingly interesting, each fifth course being recessed 3½ in. behind the general wall face. Three of the four cast lead urns at the corners of the parapet mask chimney-pots to flues from fires below, while the fourth is a dummy to match. Thomas, Earl of Fauconberg, a member of the Belasyse family, married Mary, the daughter of Oliver Cromwell, and local tradition points to a vault under the "Cromwell Room" in the Priory as the final resting-place of the bones of the Protector.

In reply to Lt.-Col. Fremantle, Mr. Greenwood said the following statement showed the average price of parlour and non-parlour houses respectively, included in contracts let by, or in direct labour schemes of, local authorities in England and Wales during each of the months of May and October, 1928, and May and October, 1929 :—

Month.	Parlour houses.	Non-parlour. houses.
1928.	£	£
May ..	445	372
October ..	427	369
1929.		
May ..	406	344
October ..	419	344

Asked by Mr. Simon if he had evidence as to whether the overcrowding, as revealed in the 1921 census, had in general increased or decreased since that date in the slum areas in different parts of the country, Mr. Greenwood said he had no direct evidence on this subject, but more than a million and a-quarter new houses had been completed in England and Wales since the date of the census of 1921, and this number was greatly in excess of normal requirements. It might therefore be assumed that overcrowding had in general decreased.

LAW REPORT

ALLEGED BREACH OF COVENANT : QUESTION OF WAIVER

Alliance Economic Investment Co., Ltd., v. *Ashfull. King's Bench Divisional Court. Before Justices Branson and Hawke*

Points of waiver and the damage to reversion were raised in this appeal by the Alliance Economic Investment Trust Co., Ltd., from a judgment of Judge Hargreaves, sitting at the West London County Court, in an action against Mr. Ashfull for damage for alleged breach of covenant and possession of 33 Cheniston Gardens, Kensington. There was also a claim for arrears of rent.

Mr. Paton, for the appellant company, said the company claimed £265 damages. The defence was that the premises came within the Rent. Restriction Acts, and a denial of the breaches of covenant. The arrears of rent were paid into the County Court, and the judge refused possession on condition that the respondent did repairs amounting to £33 within two months. The premises were held on a repairing lease for 14 years, the rent rising from £100 to £110 a year. At the expiration of the lease, the respondent became a tenant, and appellants gave notice of breaches under the covenant. The county court judge found that rent had been accepted with knowledge of the breach to repair, and as a consequence the right to claims in consequence of the breach had been waived. As to the claim for damages, he found that repairs should be done amounting to £33, but there had been no damage to the reversion, as the premises had to be put in repair before they reverted to the appellants. Counsel contended that the county court judge was wrong in his findings.

Mr. Dove appeared for the respondents.

The Court remitted the case to the county court judge for re-trial.

Mr. Justice Branson, in giving judgment, said the acceptance of rent would waive the right to insist upon forfeiture for any breach that had occurred before acceptance of the rent if the landlord knew of it, but it did not waive the landlord's right to claim damages in respect of the breaches. Further, the mere fact of there being covenants to hand over the premises at the end of the term in good repair did not prevent the landlord from claiming during the continuance of the term for breaches of covenant to keep in repair during the period of that term. His lordship thought the learned judge had misdirected himself and that the case should go back to him on the question of damages and also on the question whether he should have made the order for possession conditional. The county court judge had shut his mind against the fact that the breaches of the covenant had occurred because of the waiver of forfeiture by acceptance of rent, and in that he was wrong.

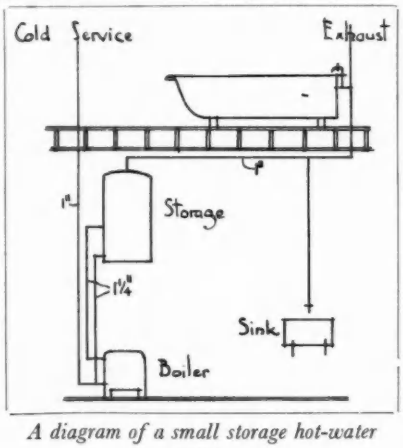
Mr. Justice Hawke concurred.

HOT WATER

Systems and Storage for Small Houses

BY DELTA

I HAVE added the words "and storage" to the title of this article, because I think that in the really small systems for cottages, etc., the storage of the hot water is an important point which is frequently lost sight of.



A diagram of a small storage hot-water system.

The secondary flow and return is, of course, essential in any cases where the fittings to be served are scattered, but most architects in designing cottages and small houses do, for general economy, group their bath and basins as near the boiler as possible. In these cases, a secondary flow and return is not only unnecessary, but it is very wasteful in dissipating the hot water generated by the boiler.

For the small house where economy of fuel is a consideration, a good-sized cylinder really well-insulated, and with no secondary circulation, will be found extraordinarily effective

As to insulation, the best I have found is newspaper. To those who have not tried this, it may sound too cheap and easy to be true; I can only vouch that it is amazingly good. Several layers of newspaper (even here, I, personally, prefer *The Times*) put loosely round sides, top and bottom, and covered with a jacket of American cloth, sewn up tightly round the pipes—there you have to all intents and purposes a thermos cylinder. This sounds dreadfully like "Aunt Jane's Household Hints," but what would you? It works far better than anything else I have met.

The smallest boiler will, on this system, run a forty-gallon cylinder; I believe it would run a larger one. The primary flow (not less than 1¼ in.) should enter the cylinder about a third the way up from the bottom, the return—of the same size—from just above the bottom; the cold feed should be taken into the return.

If the boiler is let out after the biggest demand for hot water is over, the water in the cylinder will keep hot for 12 to 18 hours, according to the climatic conditions.

The point, of course, being that once the water in the boiler is cooler than the water in the cylinder, all circulation ceases.

The one disadvantage is, of course, that the heated towel-rail becomes an impossibility. The coil in the linen cupboard is equally out of the question, but by careful planning the linen cupboard can be arranged sufficiently near the boiler for the cylinder to be placed in it, and this will give just enough heat for the purpose.

SOCIETIES AND INSTITUTIONS

GERMAN ARCHITECTURE

Mr. E. R. Jarrett delivered a lecture at the Architectural Association on the Association's tour in Germany.

He said that much of the building now going on in Germany was carried out by the municipalities, with the result that a number of well-trained municipal architects was being produced. Money was not cheap—10 per cent. on mortgages was usual—so the prime necessity for the architect was to provide the utmost value for the money at his command. Requirements controlled design, and an expressive form was resulting. Schools were generously fitted with everything that could promote the health of the child. Continual research and experiment were going on in regard to the building of housing blocks.

By standardizing, it was possible to make use of mass production in the provision of fittings of all kinds. Simplicity was the key-note.

THE FAMOUS PARTHENON

Sir Banister Fletcher, P.R.I.B.A., lecturing on the Parthenon, Athens, on Wednesday last at the Central School of Arts and Crafts, reviewed the historical events and the final victories of the Greeks over the Persians, 480 B.C., which led to the building of this world-famous temple.

Pericles, he said, the great Athenian administrator, determined to give material expression to the national exultation by erecting a votive temple to the goddess Athene, who had given them the victory, and architecture and sculpture were called to the service of the State. The Acropolis rock at Athens, no longer wanted as a military fortress, became the enclosure sacred to the gods, and the Parthenon occupied the most prominent position on that famous site.

Sir Banister referred to the fine gleaming marble in which were executed the delicate and exact forms so specially characteristic of the most marvellous of all Doric temples. Only thus, he said, could architects and sculptors have created the harmony and symmetry of design in column and architrave, roof and pediment, moulding and ornament, frieze and metope, colour and sculpture, which go to the making of the Parthenon. By the aid of many interesting lantern views, the lecturer described the details of the delicately-carved frieze of the Panathenaic procession.

RURAL ENGLAND

Mr. P. Morley Horder, in an address on "The Preservation of Rural England" at the Royal Society of Arts, said that modern conditions and science have placed in the hands of the architects the greatest opportunities the world has ever known. He asked what were they doing with them? He spoke of the great opportunities that had already been thrown away in London in Regent Street, in the Regent's Park district, and in Portland Place, whose continuity of design had already been destroyed by huge new buildings. People agitated themselves about the pylons, but those would be harmless compared with the bungalows that were springing up in all directions.

Mr. Horder showed a series of lantern views of cottages that had been bought by the Society and also the charming village of West Wycombe, which it has purchased, but for whose restoration more funds are needed.

He said it was time for town councils to face the fact that a medieval street cannot be adapted to modern needs. There is, he added, little hope of saving the beauty of England until laymen take an intelligent interest in it and a much larger share in its preservation.

Mr. Roger Fry presided.

THE WEST YORKSHIRE SOCIETY OF ARCHITECTS

Mr. G. H. Foggitt, F.R.I.B.A., in his presidential address delivered before the Society at a meeting held at the Hotel Metropole, Leeds, said that it was with great pleasure that he had again this year received from Mr. Wm. Nicholson, an hon. member of the Society, £200 for travelling scholarships. Mr. Nicholson had repeated his generosity of last year, and again enabled the Society to award three travelling studentships of £60 each, and one of £20 for foreign travel. He valued and appreciated this further evidence of Mr. Nicholson's generosity.

He said during the year a circular was sent to members, inviting the submission of photographs of executed works with a view to the awarding of a medal for a work of outstanding merit, somewhat on the lines of the London Gold Medal Award, with a view to stimulating interest in architecture; but owing either to the short time allowed for the obtaining of photographs, or to other reasons, a very limited response resulted, hardly such as had been hoped for, and no award was made. If, he said, the matter was again taken up, possibly on slightly different lines, he appealed for a sporting and adequate response.

The following appointments of officers have been made: Vice-president, Norman Culley, F.R.I.B.A.; Treasurer, Douglas Bowman; Hon. secretary, B. R. Cribbon. The contests for the Society's prizes resulted as follows: Design, £15, L. Whitaker. Measured drawings, £10, F. Whitehead. "Halden" prize, for essay, value £4 4s., W. A. Gutteridge.

CHARING CROSS BRIDGE

The following is condensed from a letter to *The Times* by Sir Banister Fletcher on the proposed Charing Cross Bridge:

SIR,—The R.I.B.A. has been able to obtain the following particulars of the plan, drawn up by Sir Edwin Lutyens and the engineers.

The river at this point runs north and south. On the east side of the river, and at a point just east of Waterloo Station, it is proposed to form a circular Place of a diameter of some 370 feet, from which eight streets radiate, Oakley Street south, the New Cut north-east, Waterloo Road north-west and south-east, and on the north side between Waterloo Road and the New Cut, the new roadway to Charing Cross Bridge, which ascends by a steep curved ramp (about 1 in 29) till it is high enough to pass over the Waterloo Road side by side with the Southern Railway. The new roadway then continues into the straight run across the bridge, leaving on the right or north side a triangular area extending up to Waterloo Road and the river front, the whole of which is to be occupied by the Southern Railway new terminal station. On the left or south side of the new roadway, an area extending south to the L.C.C. County Hall and east to York Road is to be developed by the L.C.C. At the point where the new roadway going west reaches the river, a square is formed, and within this square the road branches right and left on a lozenge-shaped plan returning to the straight on the bridge or west side. From the north and south apex of this lozenge plan, roadways are taken north to Waterloo Road, and southwards with return to York Road, which it joins at the point entered by Chicheley Street north-east of the L.C.C. Hall.

The new road crosses the river on a bridge on the site of the existing railway bridge, passes over the Embankment to a pear-shaped Place, from one corner of which it continues west-north-west to another lozenge-shaped Place east of St. Martin's Church, entered by Duncannon Street and the Strand from south-west, by the Strand from north-east, by the new road south-east and the continuation of the new road to north-west to the west of Charing Cross Hospital. Coutts' Bank, St. Martin's Rectory and schools, and other buildings are removed,

and a wide empty space is left to the east of the National Portrait Gallery, extending from the Gallery to the Hospital east and west, and from St. Martin's Church to the existing buildings north of the Cavell Memorial north and south.

This scheme is open to very serious objections on the score of traffic, of cost, of the development of London on the Surrey side of the river, and of the failure to provide any adequate opportunity for fine architectural treatment.

Other schemes which have been proposed should be investigated, further schemes should be invited in competition in order that no effort may be spared to ensure the success of the greatest undertaking for the improvement of London made since the formation of the Thames Embankment.

(Signed) BANISTER FLETCHER,
P.R.I.B.A.

READERS' QUERIES

STUCCO AND PAINTWORK

B. G. W. writes: "*I have a dilapidated old house to renovate. The outside stucco, which has many cracks, has been previously painted with numerous coats of paint, which is badly peeling off. Part of the stucco has also fallen away owing to a defective gutter. As there is only eleven years' lease to run on the premises I do not propose to paint it again, but suggest a coat of cement wash and distemper, after filling up the cracks with neat cement. Will this make a good job? If not, what would you suggest?*"

Cement wash and distemper is unlikely to adhere well to old lead and oil paint or poor stucco. If, however, the paint has practically disappeared, or can be scraped or brushed off, the proposed treatment may be effective; only inspection could decide. I am disposed to think that after repair as proposed, painting with Koverkrete, which appears to adhere well either to paintwork or cement and to be virtually waterproof, might be a satisfactory course. E. G.

DUST ON CEMENT FLOOR

C. H. M. writes: "*Is it possible to obtain any suggestions for treatment of a cement floor to lessen dust? I fully realise that this inquiry I have made rather implies a search for an impossible ideal, as that the actual problem referred to is the question of footmarks on the floors of the office part of a factory, made by people who enter from the factory itself.*"

Dusting of cement floors is a common complaint with floor surfaces which are screeded in cement and sand and subject to traffic, and its remedy has been essayed in several ways. For the treatment of *existing* floors a dressing of one of the well-known brands of cement waterproofing compound on the market has proved successful in several cases within my experience. Floors before treatment require to be washed perfectly clean, and only new, clean brushes should be used. If the trouble complained of in the present instance is partly due to dust from outside brought in by visitors, it is possible that a strip of damp matting, across which all such traffic must pass, would minimize the results. R. W.

CLEANING OAK FURNITURE

W. T. B. writes: "*I have recently purchased some well-made and substantial oak furniture which has been exposed to the weather, and has in consequence become soiled. Could you advise me please as to the best way to clean it, and to fetch up the surface to the natural oak colour?*"

It would have been very helpful if W. T. B. had given some information as to the treatment the surfaces have received by way of polishing. The query is, has the polish become "soiled" by the weather, or the actual surface of the oak?

I will assume the former, as it is more likely to be the case.

The best method would be to obtain a quart tin of spirit prepared for stripping polish, varnish, etc., from wood surfaces. I can recommend the "Perfecta" brand sold by Gedge & Co., of St. John Street, Clerkenwell. Apply this (away from all naked lights) with a flat brush, keeping each surface horizontal as it is treated, allow about ten minutes, and then scrape off with a steel scraper or a blunt knife. If one application does not remove all traces of the old varnish, etc., give it a second, and finally clean off with a rag dipped in the spirit. Allow it to dry, then rub down with No. 0 glass paper on a cork rubber. The mouldings will require special attention, and often take some time to clear.

The oak should now appear pretty well in its natural state, but if it should appear a little stained, owing to the old polish having sunk in, it might be given a weak solution of caustic soda, which, when dried out, will give it a greyer tone and will darken the silver grain somewhat, which is generally considered desirable. When quite dry, rub down again with No. 0 glass paper.

Following this, the furniture may be wax-polished, and if you desire to preserve the light greyish tone, get very pale beeswax and soften it in No. 1 petrol.

This will dry off very hard when applied and rubbed in, and the unpleasant smell will soon vanish.

J. C. R.

CORRESPONDENCE

INDICTMENT OF THE CINEMA TRADE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I was interested to read in your issue for November 13 your indictment of the cinema trade, and the rebutment by the governing director of *The Bioscope*. I think all architects will find very little they can disagree with in your contribution to the debate.

You, Sir, rather imply that the wrong architects are employed to design cinemas, and with this I heartily agree. I know, as I have no doubt you do, a number of architects who could be safely relied upon to produce cinemas as good as, if not better than, any continental examples, but as far as I can see, they stand little chance of being commissioned.

Many will, perhaps, say "Educate the public," but what chance is there of doing this while so many cinemas are busily de-educating them "continuously 2.30 to 11 p.m. daily"?

With regard to the rebutment by the governing director of *The Bioscope*, the only people I can imagine proposing such an unthinkable thing as a cinema resembling Liverpool Cathedral are members of the cinema trade themselves. No architect would dream of such a thing, and I would like to congratulate him in having a little more intelligence than his fellows in being rather doubtful as to the success of such a project. A.R.I.B.A.

OBITUARY

WILLIAM J. HALE

The death has occurred at Sheffield of Mr. William John Hale, F.R.I.B.A., at the age of sixty-seven.

He served his articles with Messrs. Innocent and Brown, of Sheffield, and commenced practice in that city in 1893. He was a past president of the Sheffield Society of Architects and Surveyors. Mr. Hale is survived by a widow and a married daughter.

WILLIAM L. NEWCOMBE

The death has occurred of Mr. William Lister Newcombe, F.R.I.B.A., of Gosforth. In conjunction with his two sons, Mr. Newcombe designed some of the principal buildings in Newcastle and the North-East.

His work in designing hospitals was noteworthy, and with Mr. H. P. Adams he was the joint-architect of the Royal Victoria Infirmary.

Other hospitals for which Mr. Newcombe was responsible include the Orthopædic Hospital and the Eye Infirmary, Newcastle; and alterations and additions to the Durham County Hospital, and to the Infirmaries at Hartlepool and Berwick-on-Tweed.

TRADE NOTES

A New Hot Water Bottle.

Messrs. Wood, Russell & Co., Ltd., have sent us a copy of their new catalogue, giving full particulars and prices of Sentry hot water boilers, Sentry boiler and oven combinations, Sentry towel rails, and Sentry gas fires. The Sentry Duplex boiler No. 6 is illustrated on this page. In winter it provides two separate boilers for heating and hot water supply with only one fire, and in summer operates as one boiler only for domestic hot water supply with half the fire. This new design of hot water boiler has been specially produced to meet a very definite and growing demand. While all large heating installations essentially require a separate boiler for this duty alone, it is becoming more and more usual for small hot water heating systems to be installed in moderate sized houses in which there is neither the room nor the labour available to operate two separate boilers for heating and domestic hot water supply respectively. The alternative has been either to make the domestic supply subsidiary to the heating system and heated by a coil taken from the latter, or to work the radiators off the domestic supply boiler. It is claimed that the first means an inefficient domestic supply, and that the second and more usual course makes for an uncertain heating system, while either involve the operation, in the summer, of an unnecessarily large boiler. By employing a Sentry Duplex No. 6, it is claimed that the user obtains all the advantages of a single fire without the drawbacks inherent in any scheme using a single boiler.

The Late William Shanks

The death occurred in London, following an operation, of Mr. William Shanks, of Barrhead, chairman of Messrs. Shanks & Co., Ltd., sanitary engineers. A son of the founder of the firm, Mr. Shanks had been connected with its activities during the whole of his business life, and for many years was chairman of the company. Its various developments were largely carried out under his supervision. In 1819, Mr. Shanks was appointed the first Provost of Barrhead.

The Late P. G. Norman

Major P. G. Norman, A.M.I.C.E., director and works manager of Tuke and Bell, Ltd., London and Lichfield, and also of the Lichfield Foundry, Ltd., which is associated with Messrs. Tuke and Bell, Ltd., has died suddenly.

Major Norman joined the firm of Tuke and Bell, Ltd., in 1920, and his engineering knowledge and his commercial experience abroad before the war had made him a most valued and esteemed colleague. He was member of the Lichfield City Council and various committees, and was appointed Sheriff of the City a year ago.

THE BUILDINGS ILLUSTRATED

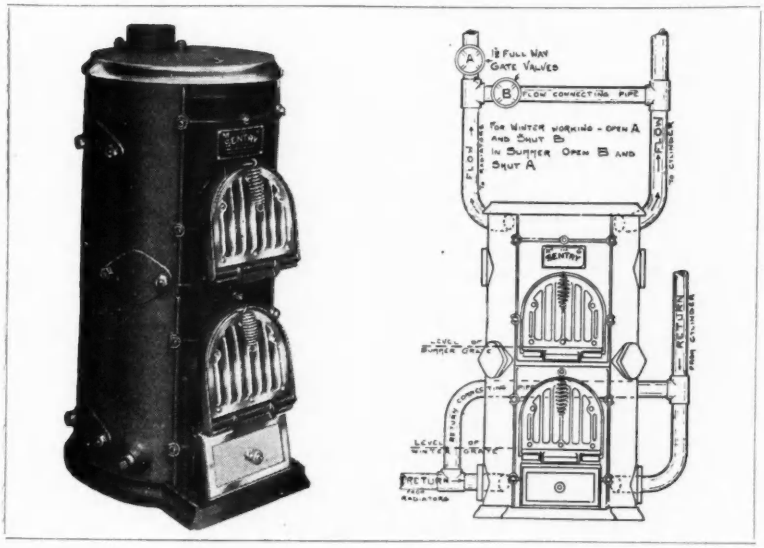
Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :—

St. Anselm's Church, Hayes (pages 864-871). General contractors, Wooldridge and Simpson. Sub-contractors : Val de Travers and Faldo, Ltd., asphalt; Binfield Brick Co., bricks; Weldon stone for window tracery and jambs; Clipsham for nave piers, sills and weatherings; Setchell and Sons, Old Delabole slates; R. E. Pearse & Co., lead lights and glazing for windows; W. E. Whiteside, Ltd., rainwater heads; Fenning & Co., Ltd., patent flooring; Rosser and Russell, Ltd., central heating; Troughton and Young, Ltd., electric wiring; Bainbridge Reynolds, Ltd., electric light fittings, sanctuary lamp, altar crosses and candlesticks and vases; John Bolding, Ltd., sanitary fittings; Hyder and Sons, Green Kent, and Bainbridge Reynolds, Ltd., wrought-iron strap hinges, gates and railings; Wooldridge and Simpson, church fittings and furniture.

The Tower Restaurant, Leicester (pages 882-884). General contractors, W. M. Sharpe and Son, Ltd. Sub-contractors : Chesham Bricks; Wm. Moss and Sons, Ltd., Portland stone; W. Shenton and Son, tiles; J. Ellis and Sons, patent flooring; Young, Austen and Young, central heating; Wathes & Co., electric light fixtures; Norman and Underwood, plumbing; Morrison and Ingram, sanitary fittings; Jas. Gibbons, door furniture; Crittall Mfg. Co., Ltd., casements; The Dryad Co., metalwork; Manu Marble Co., marble.

Messrs. Ambrose Wilson, Ltd., whose new premises were illustrated in our last issue, should have been described as mail order retailers and not as corset makers. The building was designed by Messrs. Parnacott, and stands on a site situated between Vauxhall Bridge Road and Douglas Street, S.W. The stone carving was executed by C. H. Mabey.

Exterior photographs of Lymore Hall, illustrated in the same issue, were reproduced by courtesy of H.M. Office of Works, being the copyright of H.M. Stationery Office ; those of the interior, by courtesy of Messrs. Harrods.



The Sentry Duplex boiler No. 6. In winter it provides two separate boilers for heating and hot-water supply with only one fire. In summer it operates as one boiler only for domestic hot-water supply with half the fire.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor. 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated, readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

34733. Bennett, J. H. Reinforcing members for concrete, etc., steps. November 13.

34767. Bushell, W. E. Reinforced-concrete bridge structures. November 14.

34748. Carnes, C. Concrete building-blocks. November 14.

34624. Kragt, W. J. van der. Building-brick for chimneys, etc. November 13.

SPECIFICATIONS PUBLISHED

321435. Palmer, H. S. Concrete building-blocks and methods of making same.

ABSTRACT PUBLISHED

319721. Gonzalez Antonini, T. Building blocks.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The Ministry of Health has sanctioned the proposal of the BARKING U.D.C. for the erection, by direct labour, of 114 houses on the Upney estate.

The BATTERSEA B.C. has asked the borough engineer to prepare plans for stores, buildings, etc., for the electricity department, at an estimated cost of £5,750.

The BATTERSEA B.C. Electricity Committee has considered the detailed estimate of the borough surveyor, amounting to £29,608 13s. for the erection of the boiler-house extension at the generating station, and recommends that the work be carried out.

The Essex Education Committee has purchased sites at BECONTREE, for the erection of a secondary school and a technical school.

On the site of Lever House, BLACKFRIARS, it is proposed to build a vast modern structure at a cost exceeding £1,000,000. It is expected that the work will take approximately three years to complete, and it is understood that the Margarine Union, which is now proposing to increase its capital to £11,500,000, will mainly be responsible for the work.

The Middlesex C.C. has approved plans submitted by the Joint Education Committee for BRENTFORD and CHISWICK, of a new Council school for 720 senior children.

The West Ham Education Committee is to erect an elementary school for 1,200 children at CANNING TOWN.

The Surrey Education Committee is to consider a site at CARSHALTON for the erection of a secondary school.

The Surrey Education Committee has approved plans for the erection of a central school in Stanley Street, CARSHALTON, at an estimated cost of £22,500.

The CITY OF LONDON Corporation has passed plans for rebuilding 52 Cornhill and for the erection of a new building on the site of 86-95 Leadenhall Street, 1, 3 and 5 Creechurch Lane, Bury Street and Sussex Place.

The FINCHLEY Education Committee is to erect a school for 400 children on the Woodhouse estate.

The FINCHLEY U.D.C. has asked the surveyor to prepare a plan and estimate of the cost of the construction of an open-air swimming bath at the Glebe land.

Plans passed by the FINCHLEY U.D.C.: House (amended plan), Rosemary Avenue, for the West Streatham Building Co., Ltd.; roads and sewers off East End Road, east of Cavendish Avenue, for Mr. A. Ibbetson; alterations and additions, 7 High Street, North Finchley, for Messrs. Freeman, Hardy and Willis, Ltd.; two houses, Claremont Park, for Messrs. Aird and Baldwin; four houses, Long Lane, for Messrs. G. Payne & Co.; house, Allandale Avenue, for Mr. P. Preston; bank, junction of Lyttelton Road and Hill Rise, for National Provincial Bank, Ltd.; house, Litchfield Way, for Mr. A. Wood; eight houses, East End Road, for Mr. A. Ibbetson; two houses, Friern Park, for Mr. A. H. Johnson; house, Ditchfield Way, for Mr. E. Fenn.

The Middlesex County Architect has prepared a sketch lay-out plan of the proposed scheme for rebuilding the whole of the HAREFIELD Sanatorium.

In connection with redevelopment proposals of the Prudential Assurance Co., Ltd., at Warwick Gardens and Warwick Road, the KENSINGTON B.C. is negotiating for road widenings.

The Presbyterian Housing, Ltd., is negotiating for land in High Street, POPLAR, for the erection of flats.

The POPLAR B.C. is negotiating for the acquisition of the Bow Brewery Estate. The borough surveyor considers that 120 flats could be provided on this site.

Plans passed by the POPLAR B.C.: Additions, "Guildford Arms" public-house, Chrisp Street, for Mr. C. A. Baker; additions, 96 Chrisp Street, for Mr. W. J. Foster; factory, 145 Bow Road, for Mr. D. H. Klausner; building, 169–171 Bow Road, for Mr. R. Mansell; additions, "The Manchester Arms" public-house, Cubitt Town, for Mr. T. Stevens; additions, "The Three Tuns" public-house, Pennyfields, and additions, "Ironmongers' Arms" public-house, West Ferry Road, for Mr. S. A. S. Yeo; additions, "General Havelock" public-house, St. Leonard's Street, for Messrs. Harris and Wardrop.

The POPLAR B.C. has obtained sanction for loans totalling £13,000 for the erection of libraries at Fairfoot Street and at Wick Lane, and for the extension of Bow Library.

Plans passed by the WESTMINSTER City Council: Shop front, 33 Old Bond Street, for Messrs. Wimperis, Simpson and Guthrie; balcony, Whitehall Theatre, for Mr. E. A. Stone; shelter, May Fair Hotel, for Messrs. C. A. and A. W. Haward; structure at first-floor level, Grand Buildings, Charing Cross, for Messrs. M. E. and O. H. Collins; buildings, Sackville Street, abutting on Vigo Street, Piccadilly, for Mr. C. Nichols (amended plan).

SOUTHERN COUNTIES

The BEXHILL Corporation is considering a proposal by Sea Sports, Ltd., for the erection of a bathing-pool at Bexhill.



Children's Home, Llandudno Junction, for the Conway Union. Designed by S. Colwyn Foulkes. The home accommodates fifty children, provision being made for boys on one side of the building and girls on the other. *For plans see page 893.*

The General Purposes Committee of the BRIGHTON Council has approved a £383,000 scheme for the widening of the present road at the top of the undercliff drive, Rottingdean, protection of the road from further danger of erosion, and the erection of groynes at the foot of the cliff.

The EASTBOURNE Corporation has decided to prepare plans for the bandstand and concert hall scheme at the Redoubt, so that the work can be proceeded with.

The GRAVESEND Corporation has asked the Baths Committee to consider, at an early date the suggestion for the enlargement of the swimming bath.

The GRAVESEND Corporation has asked the architect to proceed with the layout of the playing fields site, for the erection of 170 houses.

Plans passed by the GRAVESEND Corporation: Additions, Gravesend Hospital, for Mr. T. Bennett; alterations and additions, 49 High Street, for Messrs. Penlerick and Hunwick; house, Old Road, for Messrs. W. T. Dumbrill and Son; house, Old Road East, for Mr. H. L. Smith; rebuilding part of "Trafalgar Shades" public-house, Augustine Road, for Mr. C. A. Baker; addition to offices, Overcliffe, for Mr. G. E. Clay; two houses, Kent Road, for Messrs. A. E. Tong; shop and house, Kitchener Avenue, for Mr. Alfred Sidwell.

The GUILDFORD Corporation Baths Committee is to consider the question of the extension of the public baths.

Plans passed by the GUILDFORD Corporation: Five houses, Aldershot Road, for Mr. W. J. Piner; alterations and additions, 104 High Street and 67 Quarry Street, for Messrs. W. H. Smith and Son, Ltd.; house, Abbot Road, for Mr. W. G. Sheppard; two houses, Poltimore Road, for Mr. H. Ashenden; building estate, off Manor Road, for Mr. C. C. Moldram; ten houses, Grantley Gardens, for Mr. J. P. Clements; conversion into shops, Eastgate House, High Street, for Dr. A. M. Mitchell.

The HERNE BAY U.D.C. has authorized the surveyor to report upon suitable positions for the construction of a bathing-pool, including a paddling-pool and a children's boating lake.

The HERNE BAY U.D.C. has asked the surveyor to prepare a modified scheme for the layout of the pier entrance.

Plans passed by the HERNE BAY U.D.C.: Shop, Keel House, The Broadway, for Mr. W. Hancock; bungalow, Reculver Road, for Messrs. Henniker Bros.; house, Selsea Avenue, for Mr. W. Hancock; bakehouse, 169 Mortimer Street, for Mr. R. Messenger; bungalow, Douglas Road, for Mr. J. Howell.

The Oxford Corporation is to seek sanction to borrow £5,400 for the purchase of land for educational or other purposes at MARSTON.

Plans passed by the OXFORD Corporation: House and shop, High Street, Old Headington, for Mr. E. J. Hall; two houses, Ramsay Road, Headington, for Mr. G. Coppock; alterations, Great Western Hotel, Hythe Bridge Street, for Morrell's Trustees, Lion Brewery; rebuilding premises, Wolvercote Paper Mills, for Messrs. Cannon and Clapperton; house, Sandfield Road, for The Manor Estate Co.; eight houses, Wytham Street, for Messrs. T. H. Kingerlee and Sons; two houses, Monmouth Road, for Mr. A. Calder.

The Guildford borough engineer has prepared plans for the erection of forty-four houses on a site at STOUGHTON.

SOUTH-WESTERN COUNTIES

The CHELTENHAM Corporation Spa Committee is considering the proposed scheme for the erection of medical baths on the Winter Garden site.

The CHELTENHAM Corporation has obtained sanction for a loan of £34,000, for the erection of houses on the Pilley estate.

Plans passed by the CHELTENHAM Corporation: House, Cleeve View Road, for Mr. P. H. Green; shop, Old Bath Road, for Mrs. Bourne; sixty-four houses, Kipling and Shakespeare Roads, for Cheltenham Corporation; two houses, Oakland Avenue, Prestbury, for Mr. G. W. Ward; bungalow, Upper Mill Lane, Prestbury, for Mr. F. J. Newman; showroom and office, Tivoli Place, Andover Road, for Messrs. S. C. Morris and Son; substation (private), Clarence Parade, for Northcliffe Newspapers, Ltd.

EASTERN COUNTIES

The BEDFORD Corporation has acquired land in Prebend Street, for the extension of the electricity works.

Plans passed by the BEDFORD Corporation: Addition to offices, Queen's Works, for Mr. G. P. Allen; alterations, "Bedford Arms" public-house, Bromham Road, for Messrs. Usher and Anthony, for Messrs. C. Wells, Ltd.; alterations, 101 Tavistock Street, for Messrs. H. Young and Son; alterations, 73 High Street and 2 Mill Street, for Mr. E. H. C. Inskip; new premises, Dame Alice Street and The Broadway corner, for Mr. I. Daughtry, for the Bedford District Gas Co.

The CHELMSFORD Corporation Housing Committee has approved sketch plans of the layout and sites for the erection of a further 124 non-parlour-type houses, on the Boarded Barns Estate.

Plans passed by the CHELMSFORD Corporation; House, Goldlay Avenue, for Messrs. E. Allen and Son; six houses, Longstomps Avenue, for Mr. R. H. Currie; thirteen garages, Rosebery Road, for Mr. A. J. Goszett; office, Duke Street, for the County Motor Works; drawing store, Marconi Road, and extensions to offices, New Street, for Marconi's Wireless Telegraph Co., Ltd.; shop and house, Rectory Lane, for Mr. N. D. Sparrow; mission church, Waterhouse Lane, for Miss M. A. Usborne; six houses, Private Road, Galleywood, for Mr. R. W. Chandler.

MIDLAND COUNTIES

The Staffordshire Education Committee is to erect two elementary schools for the parishes of AUDLEY, HARDINGWOOD and KIDSGROVE.

The Warwickshire Education Committee is to prepare revised plans for the erection of an elementary school at BADDESLEY ENSOR.

The Stoke-on-Trent Corporation Baths Committee has selected a site in Pratt Street, FENTON, for the erection of new baths.

The LEICESTER Corporation Housing Committee has considered the question of providing houses of a suitable type for aged people, and intends to prepare a scheme for consideration.

The Warwickshire Education Committee is to erect an elementary school for 300 children, at POLESWORTH.

The STOKE-ON-TRENT Corporation has asked a committee to inspect sites recommended for the erection of a central garage.

NORTHERN COUNTIES

A new cinema playhouse is projected to be erected shortly at BOLTON. The site for the cinema will be in Bark Street, and work will be begun as soon as possible. Seating capacity wil be for 3,600 persons.

The MANCHESTER Corporation has prepared a Parliamentary Bill to confer power upon the Corporation to borrow money for the erection and completion of the town hall extension.

Plans passed by the MORECAMBE Corporation: Two houses, Devonshire Grove, for Messrs. Holroyd and Kilbank; two houses, Lancaster Road, for Messrs. Edmondson Bros.; six houses, Fairfield Road, for Mr. F. Obank; eight bungalows, Heysham Road, for Mr. H. Fairbank; eight houses, Balmoral Road and Western Drive, for Messrs. Wm. Gardner & Co.: extensions to saw mill, Main Street, for Messrs. Edmondson Bros.

The NEWCASTLE City Council has approved the construction of 3,000 houses within a period of three to five years at a cost of £1,186,650. The buildings will involve the construction of about ten miles of roads and streets.

The Housing Committee of the PRESTON Town Council recommend the acceptance of tenders for the erection of 250 houses amounting to about £94,000.

Plans passed by the SHIPLEY U.D.C.: Shop, 35 Bradford Road, for Mr. H. Bradley's executors; extension to technical schools, Exhibition Road, for West Riding C.C.; twelve houses, Leeds Road, for Messrs. Mellor and Booth.

The Lancashire Education Committee is to erect a branch library at THORNTON CLEVELEY.

The TYNEMOUTH Corporation has appointed a sub-committee to deal with the provision of new baths and washhouses.

Plans passed by the TYNEMOUTH Corporation: Layout of Manor Estate, for St. Oswin's Estates Co., Ltd.; extension of premises, West Percy Street, for Messrs. R. Graham, Ltd.; rebuilding of stores, 50 Bell Street, for Messrs. James Miller and Son; two houses, Brighton Grove, for Messrs. F. R. H. Haswell and Son; two houses, Wansbeck Avenue, Cullercoats, for Messrs. Beautyman and Gray; alterations, "Aquatic Arms" public-house, Rudyard Street, for Messrs. F. R. N. Haswell and Son: alterations and additions, premises in Saville Street and Little Bedford Street, for Messrs. F. W. Woolworth & Co.; eight houses, Hawkey's Lane Estate, for Messrs. Cackett and Burns Dick, for the Square Building Trust.

The Rev. F. W. Savory is to erect a Roman Catholic school for 200 children at WALBOTTLE, near Newburn, County Durham.

SCOTLAND

It is proposed to erect a cinema in the Piershill district of EDINBURGH, at an estimated cost, for erection and equipment, of £20,000. Plans have been passed by the Dean of Guild Court.

The GLASGOW Corporation has agreed to sell to Messrs. George Green, Ltd., ground for the purpose of an extension to their cinema in Wellshot Road.

The GLASGOW Corporation has obtained approval of the plans of the proposed new police station at South Wellington Street, estimated to cost £5,000.

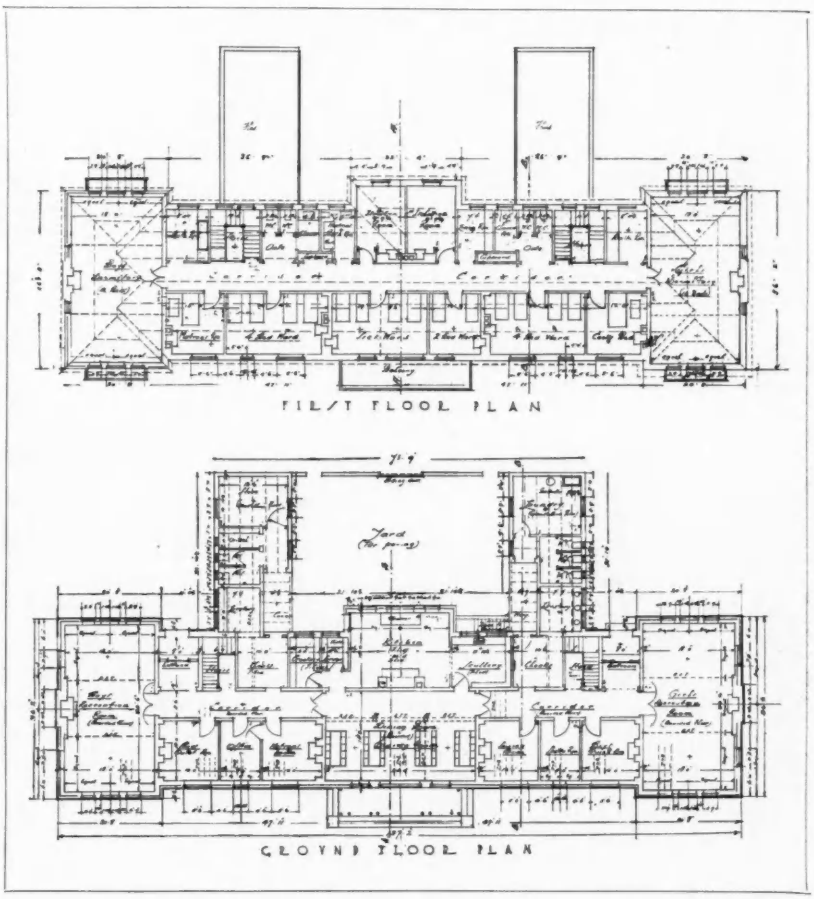
The L.M. and S. Railway is to construct a new steel span, in continuation of the steel span which carries Dobbie's Loan over the railway lines leading to the company's goods station, GLASGOW.

The GLASGOW Corporation is to extend the Larkfield bus garage, at an estimated cost of £24,000.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to October 31, 1929: 1919 Act, by local authorities, 25,129: 1919 Act, by public utility societies, 421; private subsidy schemes, 1919 Additional Powers Act, 2,324; slum clearance schemes, 10,768; under construction, 1,852: 1923 Act, by local authorities, 4,028: 1923 Act, by private enterprise, 17,262; under construction, 1,280: 1923 Act, by public utility societies, 80: 1924 Act, by local authorities, 39,817; under construction, 6,095: 1924 Act, by private enterprise, 1,377; under construction, 1,121: 1924 Act, by public utility societies, 127: demonstration houses, 17; steel houses erected on behalf of Government by Scottish National Housing Company, 2,552: total completed, 103,902; total under construction, 10,348; complete total, 114,250.

MISCELLANEOUS

At a meeting of the Incorporated Church Building Society, grants were made towards building new churches as follows: Chesterfield, St. Augustine, £120; Leigh-on-Sea, St. Margaret, £250. Towards rebuilding the churches at: Habergham Eaves, St. Matthew, £200; Llangynidr, SS. Mary and Cynidr, £50. Towards reseating or repairing the churches at: Boston, St. Botolph, £200; Hamstead Marshall, St. Mary, £30; Studland, St. Nicholas, £50. Grants were also made from the mission buildings fund towards the mission churches at: Anlaby, Yorks, £100; Bridgemary, Hants, £25; Dukestown, Mon., £50; Rhoslefain, Merioneth, £20. The following grants were paid for works completed at: Aldershot, Holy Trinity, £50; Beddington, St. Michael, £150; Drypool, St. Columba, £300; Easington Colliery, Ascension, £200; Frinton, St. Mary, £300; Horkesley, Great, All Saints, £100; Johnstown, St. Mary, £200; Sheen, East, All Saints, £150; Shiney Row, St. Oswald, Durham, £75; Sketty, St. Paul, £60. With this meeting, the committee has granted over £6,000 this year towards church extension and repair in England and Wales.



Children's Home, Llandudno Junction, for the Conway Union. Designed by S. Colwyn Foulkes. Ground- and first-floor plans. On the ground floor there are recreation, instruction, and quiet rooms, and also a dining-room, kitchen and scullery. The first floor is devoted to dormitories.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead ..	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_1	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_2	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_2	Chatham ..	S. Counties	1 5	1 0½
B_2	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teesside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour*; LABOURER, 1s. 4d. *per hour*; NAVVY, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; WATCHMAN, 1s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.				£0	11	6
Thames ballast, per yd.				0	10	0
Pit gravel, per yd.				0	15	0
Pit sand, per yd.				0	12	6
Washed sand, per yd.				0	13	0
Screened ballast or gravel, add 10 per cent. per yd						
Clinker, breeze, etc., prices according to locality.						
Portland cement, per ton				£2	8	0
Lias lime, per ton				2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.

Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. 0 1 3
PLANKING to excavations, per ft. sup. 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
If left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. 0 2 1
DO. 6 in. thick, per yd. sup. 0 2 10
PUDDLING, per yd. cube 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 2 0 0
DO. 6-2-1, per yd. cube 1 15 0
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.
LIAS-LIME CONCRETE, per yd. cube . £1 14 0
BREEZE CONCRETE, per yd. cube . 1 7 0
DO. in lintels, etc., per ft. cube . 0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube . 0 3 0
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

LABOURER, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; BRICKLAYER, 1s. 9d. *per hour*; PLUMBER, 1s. 9d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour*; LABOURER, 1s. 4d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour*; DO. *fixer*, 1s. 10d. *per hour*; LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour*; TILER, 1s. 9d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework

Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0
Old Delabole *Med. Grey*	*Med. Green*		
24 in. × 12 in. £42 11 3	£45	1	0
20 in. × 10 in. 31 4 3	33	0	6
16 in. × 10 in. 20 18 0	22	4	9
14 in. × 8 in. 12 1 0	12	16	3
Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6 7 0	
Grey-green do.	5 9 0	
Green peggies, 12 in. to 8 in. long	4 13 6	

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square 3 17 6
DO., machine-made do., per square . 3 7 6
Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour*; JOINER, 1s. 9d. *per hour*; LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard			
Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[continued overleaf

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ¾ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 9½d. *per hour*; MATE, *do.* 1s. 4d. *per hour*; ERECTOR, 1s. 9½d. *per hour*; FITTER, 1s. 9½d. *per hour*; LABOURER, 1s. 4d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1s. 9½d. *per hour*; MATE OR LABOURER, 1s. 4½d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. 4 *in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. 3 *in., per yd.*	0	1	8
DO. 4 *in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. 4 *in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 11½d. *per hour*; LABOURER, 1s. 4d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 8d. *per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. 4 *ft. sup.* "	0	2	3
DO. 6 *ft. sup.* "	0	2	6
DO. 20 *ft. sup.* "	0	3	1
DO. 45 *ft. sup.* "	0	3	3
DO. 65 *ft. sup.* "	0	3	5
DO. 100 *ft. sup.* "	0	3	10
Rough plate, ¼ in., per ft.	0	0	6½
DO. ½ *in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1s. 6d. to 2s. per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1s. 8d. *per hour*; LABOURER, 1s. 4d. *per hour*; FRENCH POLISHER, 1s. 9d. *per hour*; PAPERHANGER, 1s. 8d. *per hour.*

Genuine white lead, per cwt.	£2	0	0
Linseed oil, raw, per gall.	0	4	4
DO., *boiled, per gall.*	0	4	7
Turpentine, per gall.	0	4	0
Liquid driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	16	0
DO., *flat, per gall.*	0	16	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain " diamond " per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/32 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	c.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, DECEMBER 11

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Overheads and other Factors Influencing Road Transport Costs, from an Engineer's Viewpoint." By Major Charles Wheeler, O.B.E., M.I.A.E. John Maughfling will preside. **8 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Informal Meeting. Discussion on "The Heating of Buildings by Electricity off Supply Mains, with Special Reference to the Problem of Heat Storage and Off Peak Loads." By Arthur H. Barker, B.SC., B.A., M.INST.C.E. Sydney B. Donkin will preside. **6 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. Lecture on "The Corinthian Order." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

THURSDAY, DECEMBER 12

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Veneering, Past and Present." By C. A. Hindley. **7.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Mediæval Brasses." By Muriel Clayton. **5.30—6.30 p.m.**

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. A meeting will be held at Caxton Hall, Westminster, S.W.1. Lecture on "The Fusion Welding of Unfired Pressure Vessels," by L. W. Schuster, M.A., M.I.MECH.E., M.I.E.E., and will be illustrated with lantern slides and followed by a discussion. **7.45 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Joint meeting with the British section of the Société des Ingénieurs Civils de France, to be held in the Lecture Theatre of the Institution, Savoy Place, W.C.2. "The Electrical Plant and Network of the Société Electrique de la Sidérurgie Lorraine," by Messrs. L. A. E. Sekutowicz and A. Evain. **6 p.m.**

FRIDAY, DECEMBER 13

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. Annual Dinner to be held at the May Fair Hotel, London, W.1. 6.45 p.m. for 7.15 p.m. Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Informal Meeting. Discussion on "Welded Steel Structures," to be opened by A. Lakeman, L.R.I.B.A. 7 p.m. **7 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C. 1. "Greek Sculpture. II. (Elgin Marbles)." By W. W. Skeat, M.A. **3 p.m.**

NATIONAL SMOKE ABATEMENT SOCIETY, Room E. 17, College of Technology' Manchester. "General Aspects of the Smoke Problem." By Arnold Marsh' M.SC.TECH. **7 p.m.**

SATURDAY, DECEMBER 14

Sunrise, 8.1 a.m. Sunset, 3.49 p.m.

MONDAY, DECEMBER 16

R.I.B.A., 9 Conduit Street, W.1. General Meeting. Debate on "Are Building Bye-laws Destructive of Rural Beauty?" To be opened by M. H. Baillie-Scott, F.R.I.B.A. **8 p.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Students' Pantomime. Until December 20. **8 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C.1. "Greek Sculpture. II. (Elgin Marbles)." By W. W. Skeat, M.A. **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, SCOTTISH CENTRE. At the Royal Technical College, Glasgow. "Surges and Over-Voltage Phenomena on Transmission Lines due to Lightning and Switching Disturbances." By Dr. H. Norrinder. **7 p.m.**

TUESDAY, DECEMBER 17

TOWER OF LONDON, E.C.3. "The Tower in Tudor Times." By Allen S. Walker. (Lantern illustrations.) **11 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. **12 noon**

WEDNESDAY, DECEMBER 18

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Students' Pantomime. Matinee at 2.45 p.m. Evening performance, 8 p.m. **2.45 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Architectural Rendering." By E. M. K. Ellerton, A.R.I.B.A.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture (1)." By L. O. Faraker. "Indian Section: Cave Paintings." By T. F. Wilson, F.R.S.A.I. Both lectures at 3 p.m. **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Sheffield Sub-Centre. At the Royal Victoria Hotel, Sheffield. "Public Street Lighting, etc." By J. F. Colquhoun. **7.30 p.m.**

THURSDAY, DECEMBER 19

BRITISH MUSEUM, Bloomsbury, W.C. 1. "Origins of Architecture. II. (Romans, etc.)." 12 noon. "Monuments of Egypt. III." 3 p.m. Both lectures by Cecil Hallet, B.A., F.S.A. "Greek Sculpture. III. (Mausoleum, etc.)." 3 p.m. By W. W. Skeat, M.A. 3 p.m. **12 noon**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. "The Heating of Buildings Electrically." By Lt.-Col. S. E. Monkhouse, R.E., and L. C. Grant. Light refreshments at 5.30 p.m. **6 p.m.**

FRIDAY, DECEMBER 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture (2)." By L. O. Faraker. "Chippendale." By T. F. Wilson, F.R.S.A.I. Both lectures at 12 noon. **12 noon**

THE LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Lecture on *The Times* by John Walter, to be held in the Hall of the Royal Society of Arts, 18 John Street, Adelphi, W.C.2. **5 p.m.**

SATURDAY, DECEMBER 21

Sunrise, 8.6 a.m. Sunset, 3.50 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Mogul Design." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

TUESDAY, DECEMBER 24

TOWER OF LONDON, E.C. 4. "The Tower in Stuart Times and After." By Allen S. Walker. (Lantern illustrations.) **11 a.m.**

THURSDAY, DECEMBER 26

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. 12 noon. General Tour. By T. F. Wilson, F.R.S.A.I. 3 p.m. "English Furniture." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon**

FRIDAY, DECEMBER 27

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Chinese Porcelain. I." By L. O. Faraker. **12 noon**

SATURDAY, DECEMBER 28

Sunrise, 8.8 a.m. Sunset, 3.55 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Indian Section: Mogul Paintings." By T. F. Wilson, F.R.S.A.I. 3 p.m. "Chinese Porcelain. II." By L. O. Faraker. 12 noon. "Chinese Porcelain. III." By L. O. Faraker. **3 p.m.**

MONDAY, DECEMBER 30

R.I.B.A., 9 Conduit Street, W.1. First of three Christmas holiday lectures on Architecture for boys and girls. "English Architecture—How it Began." By the Hon. Humphrey Pakington, A.R.I.B.A. **3.30 p.m.**

TUESDAY, DECEMBER 31

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." 12 noon. "English Mediæval Sculpture," 3 p.m. Both lectures by T. F. Wilson, F.R.S.A.I. **12 noon**

WEDNESDAY, JANUARY 1, 1930

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Metalwork." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Second of three Christmas holiday lectures for boys and girls. "English Architecture—How it Grew." By the Hon. Humphrey Pakington, A.R.I.B.A. **3.30 p.m.**

THURSDAY, JANUARY 2

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

FRIDAY, JANUARY 3

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Far Eastern Pottery." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Last of three Christmas holiday lectures for boys and girls. "English Architecture—What it Means." By the Hon. Humphrey Pakington, A.R.I.B.A. **3.30 p.m.**

SATURDAY, JANUARY 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

MONDAY, JANUARY 6

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Modern Design and Decoration." By Howard Robertson, F.R.I.B.A., S.A.D.G. (Lantern Illustrations.) **7 p.m.**

WEDNESDAY, JANUARY 8

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1. "Observations on Flue Equipment, &c." By C. A. Masterman, B.A., A.I.C., M.S.C.I., M.S.I.E. **7 p.m.**

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Regional Planning with special reference to Greater London." By Dr. Raymond Unwin, F.R.I.B.A. Award of Prizes and Studentships. **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Regional Planning in S.W. Lancashire." By T. Pierson Frank, M.INST.C.E., F.S.I. **8 p.m.**

THURSDAY, JANUARY 9

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C. 2. Ordinary Meeting. **6 p.m.**



[*Reproduced by permission of Lewis Mitchell, Waterworks Engineer, Bradford.*

A VAST DAM IN YORKSHIRE:
GOUTHWAITE COMPENSATION RESERVOIR.

This reservoir is constructed on the River Nidd, about 2½ miles above Pateley Bridge, and forms a lake some 2¼ miles in length.

The masonry wall or dam is constructed of cyclopean rubble in cement. The greatest depth of water at the face of the dam is 40 feet, and the wall was carried 65 feet below the river bed, giving a maximum depth from top water level to foundation of 105 feet. The thickness at the base is 70 feet, and the length of the dam and core walls is 1,500 feet. It rests throughout its entire length on a foundation of hard solid shale.

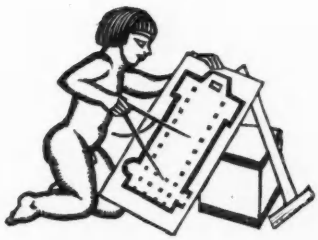
The capacity of the reservoir is 1,610 million gallons, and its area at top water level is about 327 acres. The overflow is carried over the crest of the dam through fourteen arches, each 31 ft. 6 ins. span, over and upon which a carriage road 10 ft. in width is formed.

The outflow of the water is controlled by two valve towers delivering into culverts 10 ft. in diameter, and the quantity is measured over a weir 40 ft. long, being regulated and directed by the Gouthwaite Board of Management, comprising millowners and riparian owners for some twenty miles down the River Nidd.

The maintenance and upkeep rests with the Corporation.

The reservoir dam, since its first real baptism on October 3, 1899, has been for long periods of each year full and overflowing, and the wall has proved quite watertight. On many occasions considerably over 1,000 million gallons per day have been safely passed over the overflow and weir.

THE ARCHITECTS' JOURNAL



WEDNESDAY, DECEMBER 11, 1929

THE ARCHITECT'S PLACE IN THE SCHEME OF THINGS

"It is one of the duties of the architect to help his client to make up his mind; but the architect cannot, from the nature of things, make up a vacuum!"

—CLOUGH WILLIAMS-ELLIS: THE ARCHITECT.

MR. CLOUGH WILLIAMS-ELLIS, three chapters of whose book have recently appeared in the columns of this JOURNAL, is exactly the right person to tell the public what an architect is, and to explain what are the characteristic joys and sorrows of his life. He is well equipped to popularize architecture, because he has not only a varied experience of the art of building, but is withal endowed with public spirit, and has a lively sense of the social obligations and responsibilities of his calling. He realizes that an architect is more than a business man, and in one cultural field at least he should be a leader and guardian.

A book of this nature is especially valuable in that it makes clear to the public that there is such a person as an architect, who designs buildings, who does not accept commissions from tradesmen, and who safeguards the interests of his client. Mr. Williams-Ellis is illuminating when he discusses the relationship of the architect in the first instance with his client, and secondly with the builder. In both cases the qualities required for success are geniality and understanding, a true appreciation of what each party owes to the other. It must be recognized that clients are of several kinds. Occasionally the man who intends to build a house for himself knows exactly what sort of house would satisfy him. But more often than not, the ideas of the client are vague. As Mr. Williams-Ellis says, it is one of the duties of an architect to help his client to make up his mind; but the architect cannot, from the nature of things, make up a vacuum! It is almost as difficult to deal with a client who knows too little as with one who knows too much. The architect should seize on the essentials of the problem, and resolve what seem to be the basic desiderata into a practical, reasonable, and articulate whole.

The author has much to say about the technical side of architectural practice, and readers of this JOURNAL will have read with approval and pleasure a tribute to the average builder's foreman which is long overdue. This personage, who occupies a subordinate but important position in the work of building a house, is as a rule "zealous, extremely versatile, possessed of infinite resource and extraordinary impartiality and probity." In many building enterprises architect and foreman have a true partnership of wits in which two different kinds of experience are added together, and this association with men trained for many years as building operatives is of immense educative value to the youthful practitioner.

There is evidence that architectural literature is now entering a new phase: for the first time the public is being informed concerning the more human elements in the art of building. Theories of design are undoubtedly very valuable, and there is still too little that is intelligent or illuminating written about them; but if architecture is to retain its place as a *popular* art, the public must learn to recognize the architect as a human being, and more than that, it must learn to respect and like him. Books such as that just written by Mr. Williams-Ellis are excellent propaganda, and help to dispel that reputation of heaviness which too often clings to a learned profession.

Let it be understood that an architect is not an unduly sedate nor forbidding person, but may actually be a normal human being, full of the high spirits which are needed for the prosecution of a great adventure.

NEWS & TOPICS

AN UNFORTUNATE PRECEDENT

THE apparent intention of the Government to ask the Office of Works to design both the building to be erected on the Calton Jail site in Edinburgh, and that proposed for Whitehall, creates a precedent unfortunate both for architecture and architects. It is not, as has been stressed by many people, that there is need to doubt the competence of the Government's official architects. Their excellent work is about us on every hand. It is the narrowing of the field of choice, at exactly the time when the opportunity to do something more than competent arises, that makes one doubt the wisdom of this decision, which, followed to its present extreme, allows to the nation less choice in the matter of its architect and its architecture than that exercised by a wealthy corporation.

THE D.I.A. AND THE COUNTRYSIDE

In the course of a letter from the D.I.A. arising from my recent note about their present aims, the Secretary says: "We have by no means abandoned the task of educating public taste in regard to everyday things used in the home in order to become the handmaid of the C.P.R.E., and we are not such ostriches as to believe that industrial design is purged of nastiness. It is true that we are devoting less attention to pots and pans. . . . Pots can be broken; bad houses, bungalows, garages, ribbon developments, cannot be so easily destroyed. . . . We have thrown our weight into the movement for the preservation of amenities, and in so doing we have not abandoned our function of raising the standard of public taste in the things of everyday life, but extended it . . . ." This seems, on the whole, to confirm my view that the D.I.A. was becoming an appendage to the C.P.R.E.

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Now, the C.P.R.E. is doing excellent work, and should have all support; but then the D.I.A. was doing excellent work, too. It should face the fact that it will be a disaster if the external appearance of the factory and its position in the countryside should exercise an exclusive claim upon its attention. Which hurts civilization most: a factory that is well designed, surrounded by gardens, screened by trees, and unharmful to the landscape, where production is concentrated on the manufacture of cheap and thoroughly nasty sham rubbish, or a factory that mars a view and is sinfully ugly (although quite fit for its purpose), where things of pleasant shape and enduring practical and æsthetic value are made? The D.I.A. might find it difficult to collaborate with the C.P.R.E. in answering.

"ENAMEL SIGN HARPIES"

Enamel signs were strongly criticized by Mr. Harry H. Peach, the hon. secretary to the Council for the Preservation of Rural England Exhibition Committee, in a paper read before the Royal Society of Arts last week. They are undoubtedly among the worst offenders in the disfigurement of villages. The moment one sign goes up, the site, in the words of Mr. Peach, is pounced upon by the whole flock of "enamel sign harpies." Other sad disfigurements of the street are, of course, the shop front, where each firm tries to shout the other down, the ruin of beautiful old houses by unsympathetic treatment, lack of uniformity in the lettering on shop fascias, and the big advertisement sign. I share his surprise that architects have not demanded legislation to prevent the spoliation of building façades. He suggests a real use for the enamel sign—to line cart bottoms. The carter says the bricks slide off beautifully!

TIDYING UP

Mr. Peach not only had much to say with regard to the "untidy mess" made by most garages, the "nasty disease" called flybilling, and of how he cured a local paper which had an "eruption," but he gave many sound suggestions for the present and the future: suggestions which should be adopted not only by architects but by advertisers themselves. One garage owner told Mr. Peach that the Warwickshire County Council had made him remove a number of signs. He had a yard full, yet he was pestered every week by the advertisers trying to persuade him to put up others. A friend recently travelling in America told him that in a ninety-mile run through lovely country he was never once out of sight of advertisements. One of his many stories concerned Leicester. A good citizen gave a square opposite the beautiful church where Chaucer was married, and near Simon de Montfort's old castle, but the Corporation are placing a public convenience in it! Squares, he says, should be for public uses, not public conveniences. When all is said and done, the real place for advertisements is in the press, and, as Mr. Peach rightly says, if outdoor advertising can justify its place in this country it must cleanse its own nest, learn more taste, give up bludgeoning, and use more brains.

MAN-MADE HOUSES

If there is an expression profoundly distasteful to me it is that reference to contemporary domestic architecture as "the man-made house." It is a glaring form of Fleet Street pander: and it is, as we all know, rot. Coming from *The Daily Mail*, and attached to a novel form of competition, it leaves me divided in my loyalties. *The Daily Mail* has shown itself a patron of architecture. It has organized the Ideal Home Exhibition; and it has held competitions for Ideal Houses and interiors. We are indebted to *The Daily Mail*. But when it turns round, like a music-hall singer who asks "all the young unmarried ladies" to sing the next verse, and holds a competition for an Ideal House to be designed by women only, just to show that they *do* know where to find room for cupboards, and where to put the pram, then I feel like excusing myself for the next occasion.

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The pathetic side of this so-called competition is revealed in the conditions, which call for no drawing or literary ability; that is, no conciseness or clarity of expression; and further, state that the drawings of the prize-winner will be submitted to the Exhibition architect, who will make them buildable. I can only hope that *all* these documents will be on view; for obviously someone is to win the prize, and it would be interesting to know that, either the Exhibition architect made something out of very little, or else, that a qualified woman architect disdained his assistance. It is the attitude of Fleet Street that brings despair.

WHO DESIGNED BATTERSEA POWER-STATION?

The heated public discussion which has for long raged over the probable injurious effects consequent upon the establishment of a super-power station at Battersea, have obscured a point which should be given some consideration



A measured drawing of the Radcliffe Observatory, Oxford, James Wyatt's early-nineteenth-century building, which has escaped translation to South Africa, whither its scientific apparatus is to go.

if we were as architecturally-minded as we ought to be. Who has designed this power-station, and what is it to look like? It is obviously going to have several great chimneys, and will be the size of a cathedral, and it may be very fine, as Lots Road power-station is fine from certain standpoints in certain conditions of the atmosphere. But is there any method of ensuring this? And is there any authority capable of preventing its being both the largest and the ugliest, as well as the dirtiest building within the inner centre of London?

A.A. SAMPLES BUREAU

I was introduced last week into a veritable cave of treasure in the basement of the A.A. building, nor was a genie lacking to reveal its thousand and one secrets. Their Building Materials Bureau fills a need acutely felt by the practising architect, as well as providing educative information for the student. In the boyhood of most now practising, brickmakers, quarry masters, timber importers, limeburners, iron and brass founders, leadmakers, glass-makers, and paintmakers covered between them practically the whole field; today it is not unusual for the number of firms concerned in a large job to run into three figures. For a year past the samples of modern products have been in the course of collection and indexing, and this information is now at the disposal of those interested, in circumstances entirely cut off from commercial considerations. The next step will be to secure the standardization of trade catalogues, and about this I hope to have something to say in a week or two.

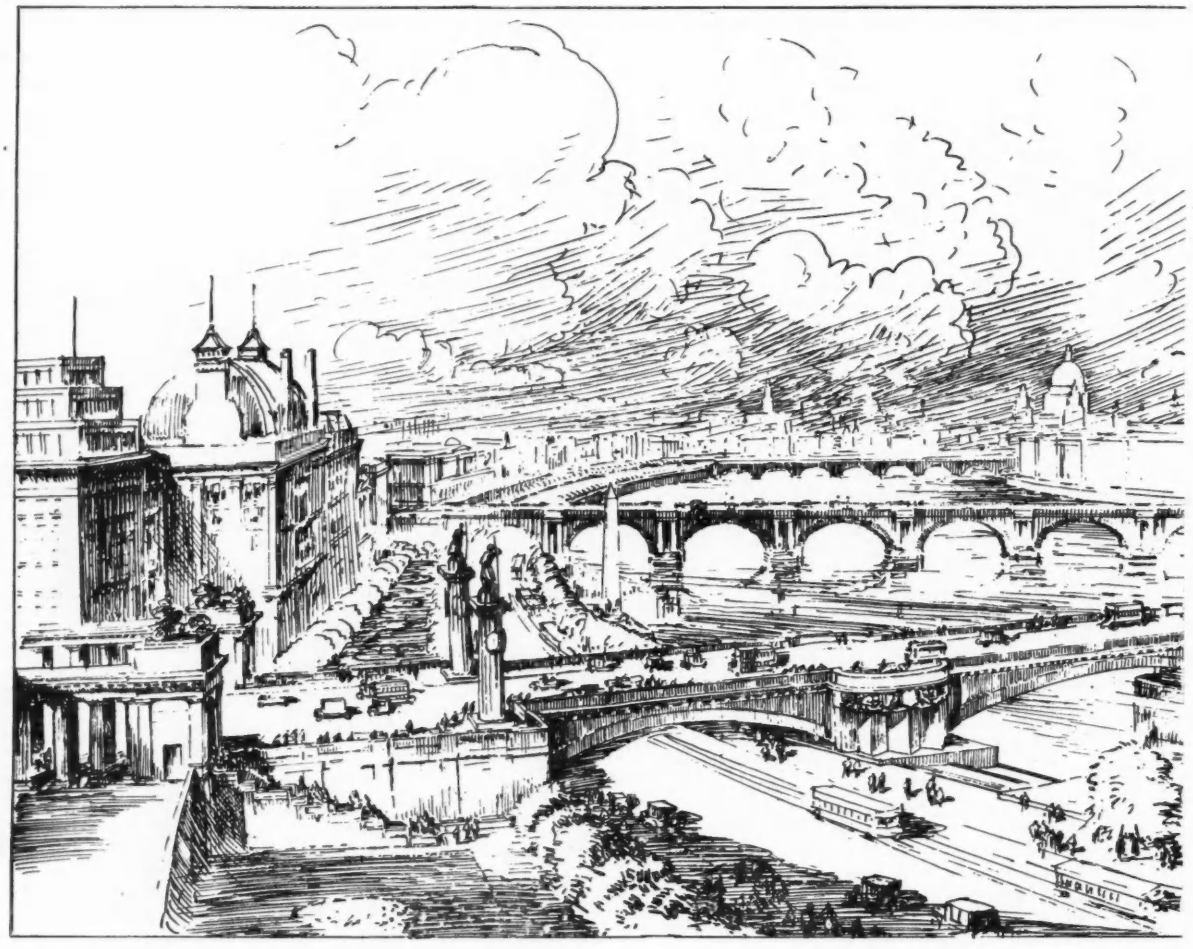
A TOWER OF THE WINDS

The Radcliffe Observatory, as illustrated by the measured drawing, has recently been in danger of translation to other parts. I understand that the scientific instruments have been acquired for removal to South Africa, and had help not been forthcoming the Observatory building might have disappeared in like manner. Although the Radcliffe Observatory occupies quite the least prominent position of any Oxford building of the same importance, it is a fine example of a very good period. It was built early in the nineteenth century by James Wyatt, who very properly borrowed for his motif the power of the winds. Below the four winds, at a lower level of the tower, occur panels in low relief with the signs of the Zodiac. The whole design is really nearer to us today and its influence stronger than many better-known buildings which we have seen fit to preserve. The Underground Building, the latest Tower of the Winds, has its own observation platform from which to espy the terrestrial if not the celestial terrain.

FISHY ARCHITECTURE

In his address recently delivered to the Liverpool Architectural Society, Mr. Trystan Edwards found something very fishy about modern architecture. There was something peculiar about the windows of most of the modern buildings, particularly the German. Their horizontal, instead of the traditional vertical, emphasis made them look suitable homes for flat-fish. Bush House he likened to 10,000 minnows glued together to form a whale, whereas the new Underground Building justified its size because it was solely occupied by a powerful combine. But if some buildings exaggerated the horizontal element, others exaggerated the vertical. Notions, like Le Corbusier's, of cities consisting of a few gigantic buildings, each containing 40,000 people, were architectural Nihilism.

ASTRAGAL



Professor S. D. Adshead's perspective sketch, illustrating his proposals, viewed looking eastwards along the north bank of the Thames. These envisage the development of an

CHARING CROSS

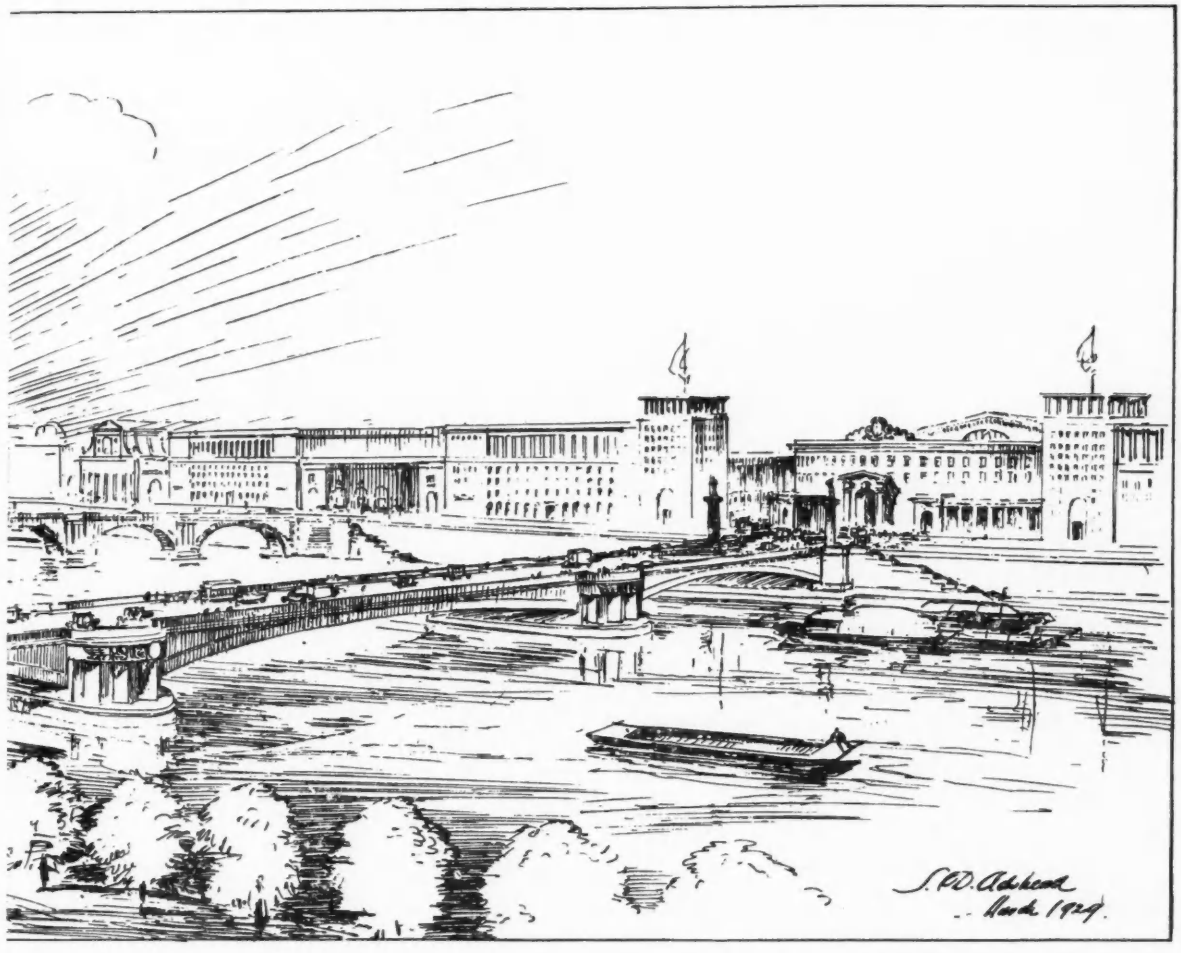
The Demand for an

BY

AT last the general public has been vouchsafed information concerning the scheme of Charing Cross Bridge and its environs, agreed upon by the London County Council and the Southern Railway. The Bridge would enter the Strand immediately at the top of Villiers Street, opposite which a wide place would be constructed. The road leading from the opposite end of the Bridge would end in a circus at the junction of the New Cut, Lower Marsh, and Waterloo Road. The Bridge itself is shown as occupying the exact position of the present railway bridge. On the Westminster side the spans of the new Bridge, as between Victoria Embankment and the Strand, deviate from the line of the present Charing Cross Station in order to reach the Strand immediately opposite the point at which Villiers Street now enters it. It may be assumed that almost the whole of Villiers Street would have to be closed and the dwellings demolished.

At the western termination of the Bridge the road is seen to fork, one branch leading to the Strand and the other branch to Northumberland Avenue, which is reduced in width at the Embankment end in order that the approach road to the Bridge should be ramped up from it. It is extremely difficult to visualize any architectural treatment of these roads which could prove in the least degree satisfactory. The Bridge itself can have no adequate vista towards its north-western extremity. On the Surrey side of the river the development plan does not differ in essentials from the one foreshadowed earlier in the year, and it suffers from the same great objections which were pointed out at the time when it was first proposed.

As Sir Banister Fletcher points out in his letter to *The Times* of November 29, the new station comes right up to the river instead of being set back at some distance from it; so it would be impossible to execute the cherished scheme of developing, in a fine architectural manner, the district on the Surrey side between the river and the existing railway from London Bridge to Charing Cross Bridge. The inordinate length of tunnel which the new scheme imposes both in York Road and in Waterloo Road is a serious objection to it. Moreover, the layout on the Surrey side seems to have been devised with the minimum regard for the financial aspects of the problem. Far more old street frontages are destroyed than new ones created, and, while millions would be expended upon new street works, the rental value of the sites abutting upon the roads would be very little increased. The layout of the roads on the Surrey side, judged from the æsthetic point of view, can only be described as hideous, and must be the work of men untrained in that particular type of intellectual



embankment on the opposite shore, with dignified buildings, as a part of the whole design—in short, competent town-planning, which is conspicuously absent from the official scheme.

BRIDGE CRISIS

Open Competition

LANCEA

activity which is required for the achievement of civic design. In a case of this kind one must judge a scheme by its intrinsic merits, and no reference to the supposed authority or reputation of those responsible for this scheme should influence the just criticisms which may be directed against it.

Not only is the layout architecturally insignificant, but it even fails to serve the main utilitarian object of solving the traffic problem. The proposed position of the station interferes with traffic north and south on the Surrey side of the river. Belvedere Road is stopped altogether. No provision is made in this scheme for a continuous roadway passing along the river front as on the Middlesex side. No provision is made for access to the Embankment from the Bridge, and the junction with Northumberland Avenue has not been properly thought out. According to the official plan, the approach to the Bridge from this thoroughfare is at the point where it is joined by Craven Street. In order to obtain an easy gradient from Northumberland Avenue to the Bridge, this street would need to be reconstructed at enormous cost without any possibility of improving the property adjacent to it.

The London County Council is apparently pleased with its work, and has every intention of pressing forward a Parliamentary Bill to give effect to its proposals. The Bill includes powers for the Underground Electric Company, and for the compulsory acquisition of the lands and other easements for the railway works and other purposes. Provisions are also sought to enable the Council to construct a new temporary bridge and new street works.

As might be expected, this decision of the London County Council has aroused formidable opposition. Not only has Sir Banister Fletcher registered an emphatic protest on behalf of the Royal Institute of British Architects, but the Conference of Societies which was formed for the protection of Waterloo Bridge, and is still in being, is determined to use its powerful influence for the amendment of the proposed scheme for Charing Cross Bridge and the layout of its environs. Moreover, the London County Council will also need to contend with the Press, which is the vehicle of public opinion in this matter.

The leading article in *The Times* of December 5 puts the case for delay with great courtesy. A vital principle of democracy is here at stake. It is somewhat astonishing that a body such as the London County Council, which is publicly elected, should resent public criticism of its actions. Sir Percy Simmons, on behalf of the County Council, is aggrieved that criticism of the Charing Cross scheme by the Royal Institute of British Architects should

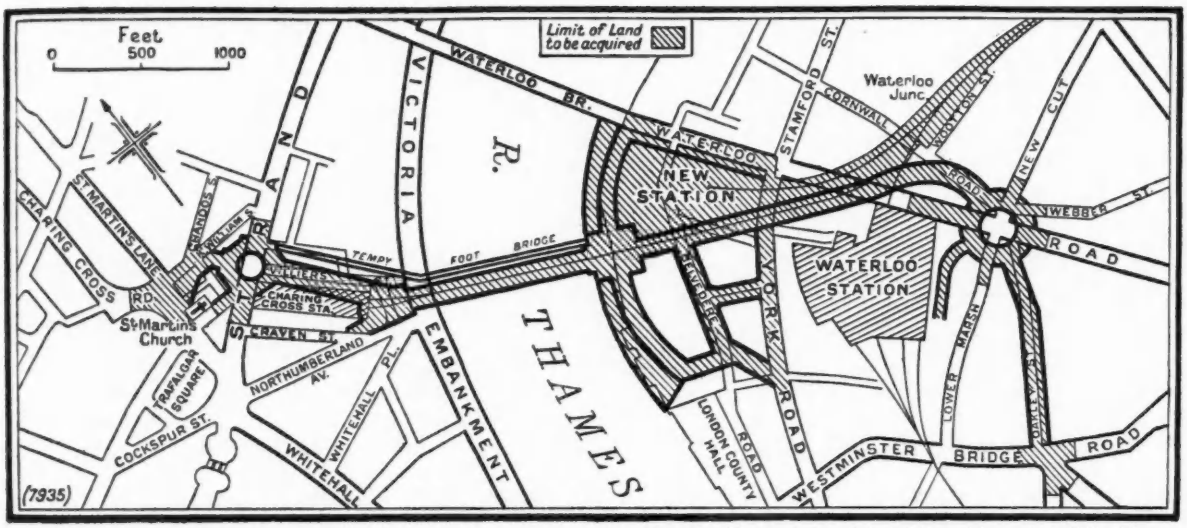
have been delayed until last week. The obvious answer to this is that the exact nature of the scheme has been kept a profound secret until a few days ago, it being the intention of the Council to rush their Bill through Parliament as quickly as possible, and this in spite of the fact that the Treasury is providing a large proportion of the money to be expended on the execution of the scheme. One might have imagined that the experience of the London County Council over the Waterloo Bridge question would have made them realize the inadvisability of treating with such contempt the advice of those learned and academic professional bodies which, whatever their faults may be, the public is still pleased to regard as high authorities upon certain aspects of our civilization.

And not only the professional bodies but the public at large is entitled to express its opinion upon matters of such importance to itself. In this connection one may revert once more to the democratic concept as applied to architecture and town planning. It is a monstrous anomaly that projects of civic design of such great import to the Metropolis should be conceived in secret and sprung upon the public without any opportunity having been given for the expression of detailed criticism. Lord Esher asked the pertinent question why Londoners should not see sketches and a model of the proposed vast changes in the aspect of their city? And why should they not see the form of question put to Sir Edwin Lutyens; and his reply? The spokesmen of the London County Council contend that in employing Sir Edwin Lutyens to advise them they have completely fulfilled their artistic obligations and have done full justice to the architectural aspects of the Charing Cross Bridge problem. But we should like to be informed as to the amount of liberty which was given to Sir Edwin to modify the scheme which was agreed upon between the engineers of the London County Council and the Southern Railway. Many people entertain the suspicion that the scheme as originally conceived by the engineers still holds the field, and that the modifications suggested by Sir Edwin Lutyens are insignificant. But, however this may be, the scheme stands condemned as wasteful, inefficient, and lacking in every noble quality of civic design.

The correspondence columns of *The Times* contain valuable suggestions for dealing with the situation which has now arisen. Professor Adshead, who has himself produced a scheme for Charing Cross Bridge to which further reference will presently be made, pleads for a competition in which the many excellent and varied proposals which have already been put forward by well-qualified and disinterested persons could be more fully developed, together with others as yet unexplored. This seems the obvious solution of the difficulty, for a properly conducted competition, in which architects are invited to treat the problem in a comprehensive way, should produce results far more satisfactory than can be arrived at by allowing so important a matter to be decided by a few engineers working *in camera*. By this means it would be possible to ensure that the layout of the roads should be related to the traffic problem of London as a whole, that a fine scheme of river-side building might be made possible on both sides of the river, and that the new Bridge itself might be a work of architecture.

It would not be necessary when determining the conditions of such a competition to start from the very beginning, for it would be possible to take advantage of the many valuable suggestions which have already been put forward. The exhibition of Charing Cross Bridge schemes which was held under the auspices of the London Society this autumn represents an amount of careful research which must not be wasted. In particular, the brilliant scheme by Professor Adshead contains elements which might well prove a basis for further development by the entrants in such a competition.

Meanwhile the whole question is due to be discussed in Parliament in the near future. In the interval which will elapse between now and these debates, it would be of advantage if the conditions for a great competition, the assessors of which should obviously include a town-planner besides an architect and an engineer, could be drafted in detail.



[*Reproduced by permission of the L.C.C. and by courtesy of* The Times.

Plan of the scheme agreed upon in conditions of secrecy between the Southern Railway and the London County Council, and now put forward for Parliamentary sanction by the latter body; its details were only disclosed some ten days ago, and have already been the subject of influential criticism.

MODERN DESIGN AND DECORATION

BY HOWARD ROBERTSON

Following are extracts from a lecture on this subject delivered by Mr. Howard Robertson at Goldsmiths' Hall on Wednesday last. Owing to the large number of unsatisfied applications for tickets for the lecture, it has been decided to have a second lecture on January 9, at 7 p.m., when tickets will be available for those who were not able to attend on the previous occasion. Applications for tickets should be sent to the Clerk of the Goldsmiths' Company, Goldsmiths' Hall, E.C.2, before that date.

FRANK LLOYD WRIGHT, one of the most original and creative of modern architects, has described architecture as establishing emotional relationships by means of raw materials. "Architecture goes beyond utilitarian needs. By the use of inert materials, and starting from conditions more or less utilitarian, the architect establishes a certain relationship which has aroused the emotions." Architecture, therefore, is building touched by emotion.

In all civilizations architecture has reflected the influence of three main factors. First, the service which the building has to offer—in architectural parlance, the programme. Secondly, the structure, the method and materials employed in the realization of the programme. And thirdly, the expression, which largely shapes the form and decoration, and is derived from influences which include the heritage of tradition, the fashions of an epoch, and the personality of the designer. All architecture which truly responds to the programme, which is structurally in accord with the best knowledge available, and which in expression is a natural outcome of the influences of its epoch, is modern. If it reflects the needs and moods of tomorrow, it may be called *l'architecture d'avant-garde*.

Structurally, today, we are on the verge of the cantilever phase, expressed by reinforced concrete structure, in which columns on the exterior of a building support a slab of concrete, on which may stand walls and other posts which support the slabs above. In this structure, the walls serve merely to enclose space, and may even be entirely of glass, for all supports are within the building. Le Corbusier, Erich Mendelsohn, and a few other architects have designed on this structural principle. The resultant architecture can have no link with tradition, for in every sense it is directly opposed to every preceding traditional phase. It must seek its own free expression, a form and detail peculiar to this new architecture of vehemence and tension.

The revolutionary nature of this structural change and the development of the steel frame has been part cause of the chaos which reigns in architectural expression. Another factor is the rapidity with which influences succeed each other today. Art movements come and go rapidly, the Art Nouveau, the Arts and Crafts, the so-called machine age. Each is the product of a social reaction, and architecture, with its structural basis, is yet subject to passing fashions. It should, in fact, be so. For fashion is not unhealthy; it produces change, as it is itself the product of change. It keeps art on the move, and reaction against it is foolhardy. The principles of good design are fundamental; but the mood of the artist may be ever changing.

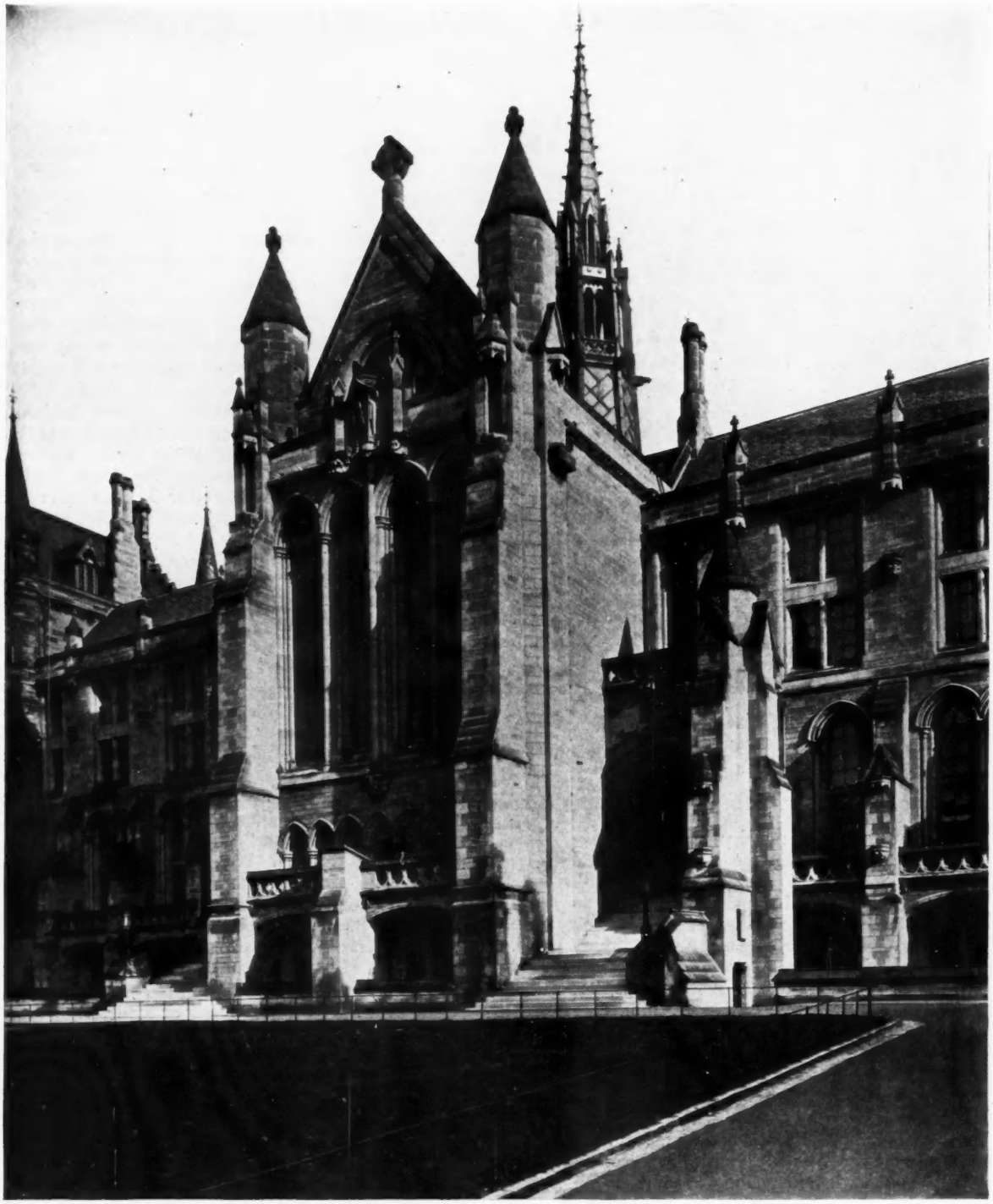
In architecture this is strikingly evident; and there is enormous variety for expression in buildings built for similar purposes and having the same type of structure. Buildings vertical, buildings horizontal, buildings criss-cross, are often the product of the same mind. In Holland, a few years ago, verticality dominated. Today we have sweeping horizontal lines in the new Dutch housing blocks. Take also Germany, with its Berlin office buildings and stores inspired by a Gothic verticality. Today that is gradually changing, and the new fronts on the Kurfürstendamm stream out like banners with alternating layers of glass and metal or Travertine, while a new counter movement is beginning in favour of pattern which neglects direction altogether.

Few modern buildings are exempt from fashion in expression. Even the magnificent Frankfurt Market Hall, so grandly functional, reflects in its details the crisp simplicity of today's decorative note. Fashion in England is for "atmospherics" and rather luscious detail, in Germany for a striking severity and beautiful effects of light, in France for a light and witty suggestion of the machine. The interior of the Universum Cinema in Berlin is a superb achievement in architectural line and illumination, the Théâtre Pigalle in Paris achieves a brilliance compounded of metal, light, and an intellectual smartness of line. Even architecture for animals is subject to fashion, and in the Copenhagen Zoo is a new monkey-house in which astonished and delighted simians gambol on geometrical rocks which might have sprung from the canvas of some cubist painter.

Modern rooms, with straight and horizontal lines, spare furnishing, low clear tones of colouring, relieved by glass and patterned textiles, demand an accompaniment of silverware which must be in a new note of harmony. The Germans, the Swedish, the Austrians, the Americans are sensing the new demand. We in England, architects and craftsmen alike, are too apt to remain aloof in our love of some past tradition. We stress too much, perhaps, the expression of material. Material should be the servant, not the master. Where plain surfaces are desirable, we should not lust after pattern and wirework. Our problem, after all, is to beautify everyday objects, achieve harmony with the ever-changing conditions of living, and, rather than despise the taste of the day, seek out its beauties, which exist had we but eyes to see them.

Let us study and absorb the principles of design, the laws of harmony and proportion in which there is such a real basis of easily-understood geometry. Let us have a knowledge of form, and practice in the assemblage of mass. Let us understand the significance of mouldings, and acquire an appreciation of surface, plain and decorated—particularly plain. Then, let us study our *clientèle*, the programme: the practical everyday use of objects, their present shortcomings, the possibility of infusing into their design imagination and vitality.

Let us travel, if not abroad, at least in our own country. What craftsman can design for an hotel, a town or country mansion, without first attempting to absorb the atmosphere of his task? To do so is difficult, but it is part of the creative task. And let us not, in this age of advancing science, be ashamed to be modern.

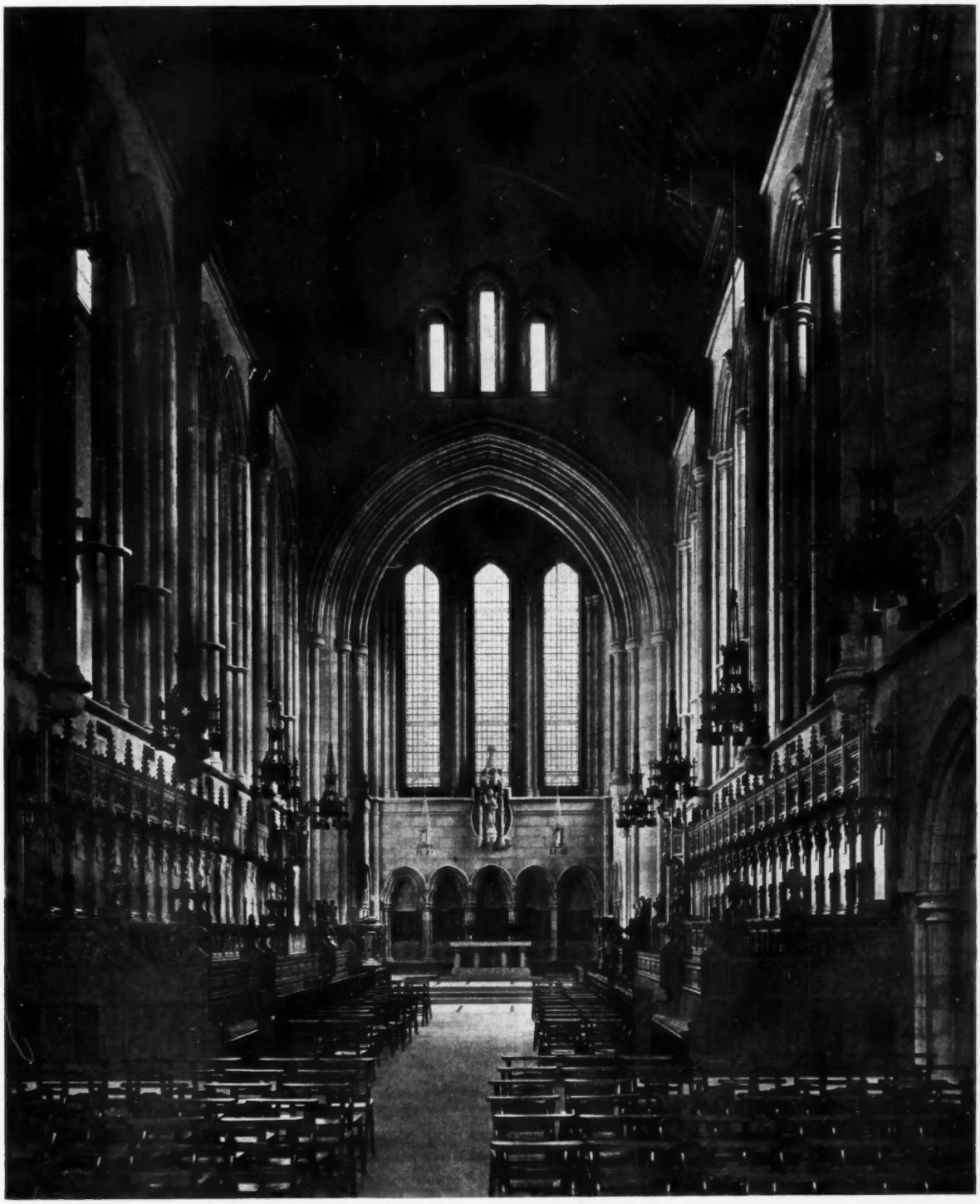


A view of the Chapel and Arts wings, taken from the west. A view of the chancel end appears on page 909.

MEMORIAL CHAPEL,

DESIGNED BY JOHN

THE New Memorial Chapel and Arts Building, Glasgow University, has been erected on the west side of the west quadrangle, this side having been left incomplete when the earlier structure was built. Certain limitations were imposed on the design of the new block in view of the existing corner pavilions, and the architects have contrived to carry the spirit of the earlier work into the new. At the same time they have made the collegiate buildings form appropriate flanks to the Memorial Chapel, which stands prominently in the centre of the scheme. The buildings



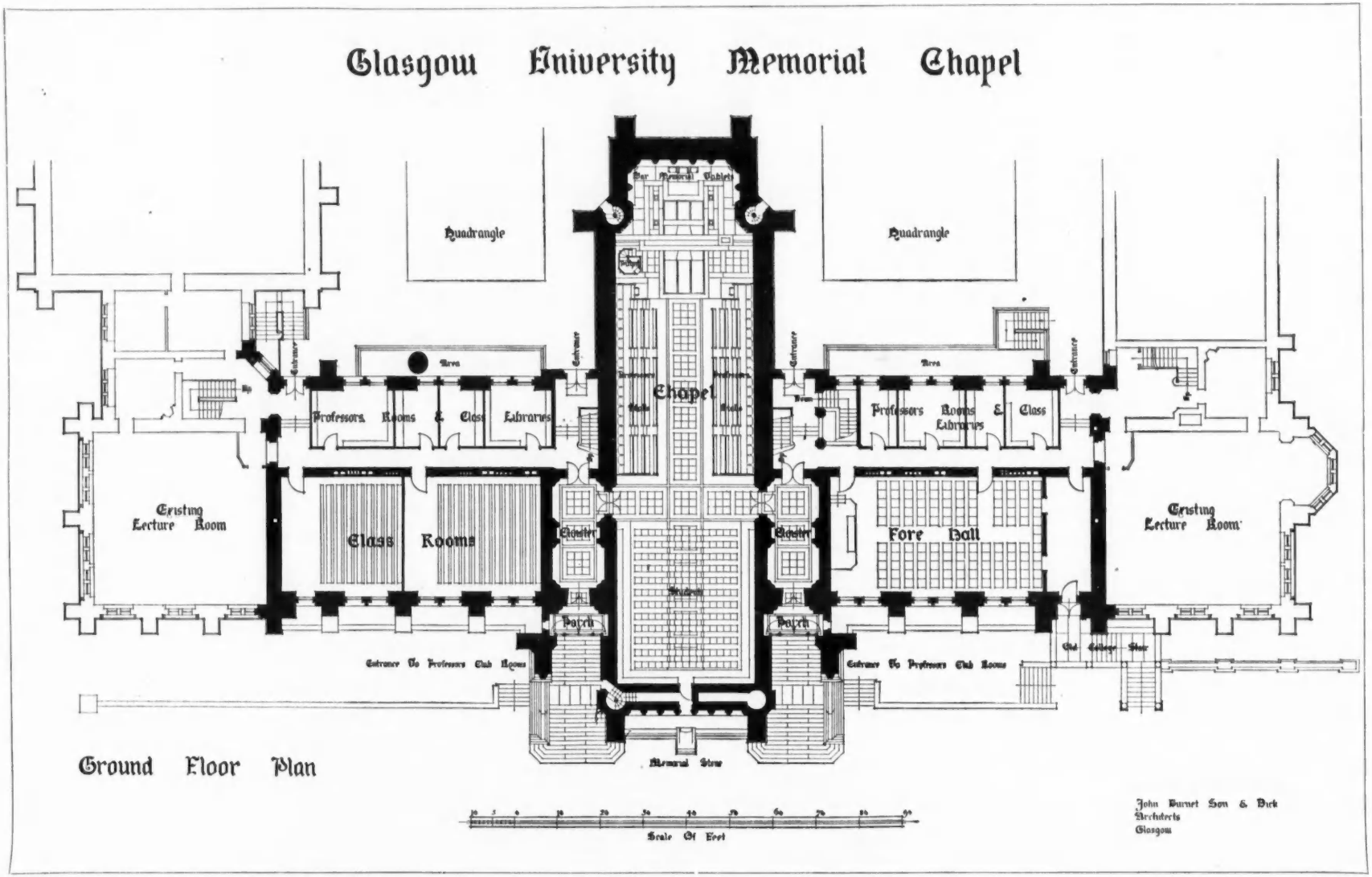
The chapel, looking east towards the chancel, within the lower arches of which are black slate panels bearing names of the fallen.

GLASGOW UNIVERSITY

BURNET, SON AND DICK

are of fireproof construction throughout, the skeleton structure being of reinforced concrete. Stone has been used to face the building, both externally and internally.

The plan of the chapel is simple and straightforward, being in the form of an oblong nave, with a wide arch at the east end, leading into the chancel. The lower walls of the chancel are delicately arcaded, and within these arches are contained black slate panels bearing the names of the fallen. The lower portions of the chapel walls are plain and unbroken, save for doorways, for a height of



Memorial Chapel and Arts Building, Glasgow University.] [*By John Burnet, Son and Dick.*

The new Memorial Chapel and Arts Building stands between two existing lecture-rooms. The Memorial Chapel has been designed as the central and dominating feature, with the collegiate building as appropriate flanks. In the Arts building, the accommodation includes class-rooms and libraries, professors' rooms, dining-room, lounge, writing and common rooms.

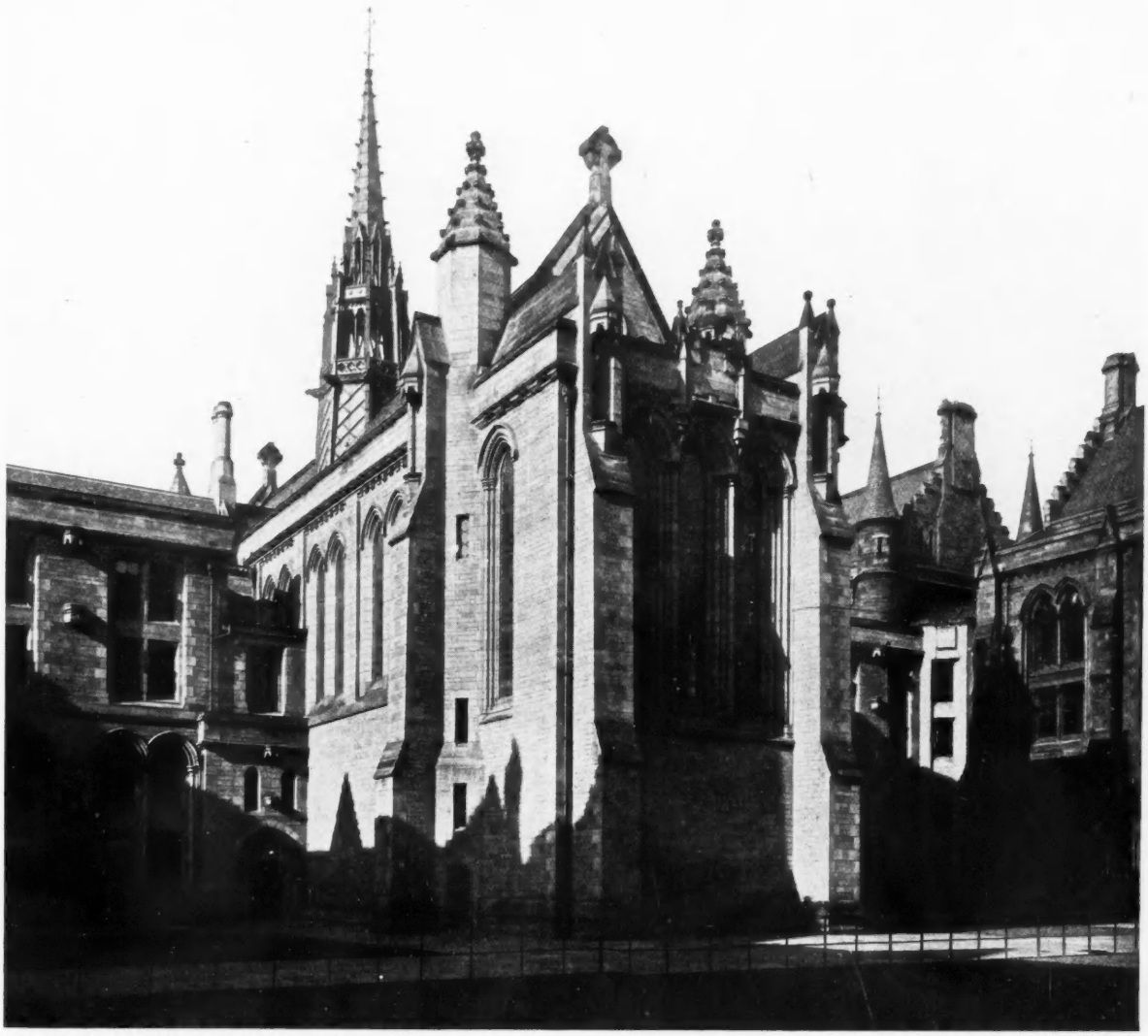
18 ft., forming a bar to the clerestory arcading above. The fenestration of the chapel is contained within this arcading, the exquisite balance of light and shade throughout being particularly noteworthy. From the level of the caps of the arches rise the principal trusses of the Austrian oak hammer-beam roof. The interior furnishings of the chapel have reached a high standard, both in design and craftsmanship.

In the Memorial Chapel great use has been made of symbolism in the enrichments, which tell the story of the purpose of the building, its relationship to St. Kenelm or St. Mungo—the travels, trials, sacrifices and ideals of St. Mungo—and of those who have followed in his footsteps as members of Glasgow University.

Ornament has been used as in days gone by as a language, not only in the more important figure compositions, but in the caps of the shafts, the ends of the drip moulds of the arcading, and the lesser details.

The pulpit bears within its niches four Scottish saints—St. Margaret, St. Bride, St. Columba, and St. Oran. At the newel of the pulpit stair a small figure is shown scattering the good seed of the work of God. The communion table is of Blaxter stone, and has the symbols of the Twelve Apostles carved into the Norman caps. The glasswork is simple, and only temporary until such time as stained glass windows are inserted.

In the wings of the building devoted to the Arts Faculty, space has been provided for classroom accommodation, together with private rooms for the use of the lecturers; while small libraries, working in conjunction with the classrooms, are situated near these. The lower or basement floor of the scheme has been set aside for the use of the teaching staff. The portion to the north-west comprises the dining-room and kitchens, while that to the south-west forms a lounge and writing-room. The centre portion, immediately beneath the chapel, has been set aside as a common-room.



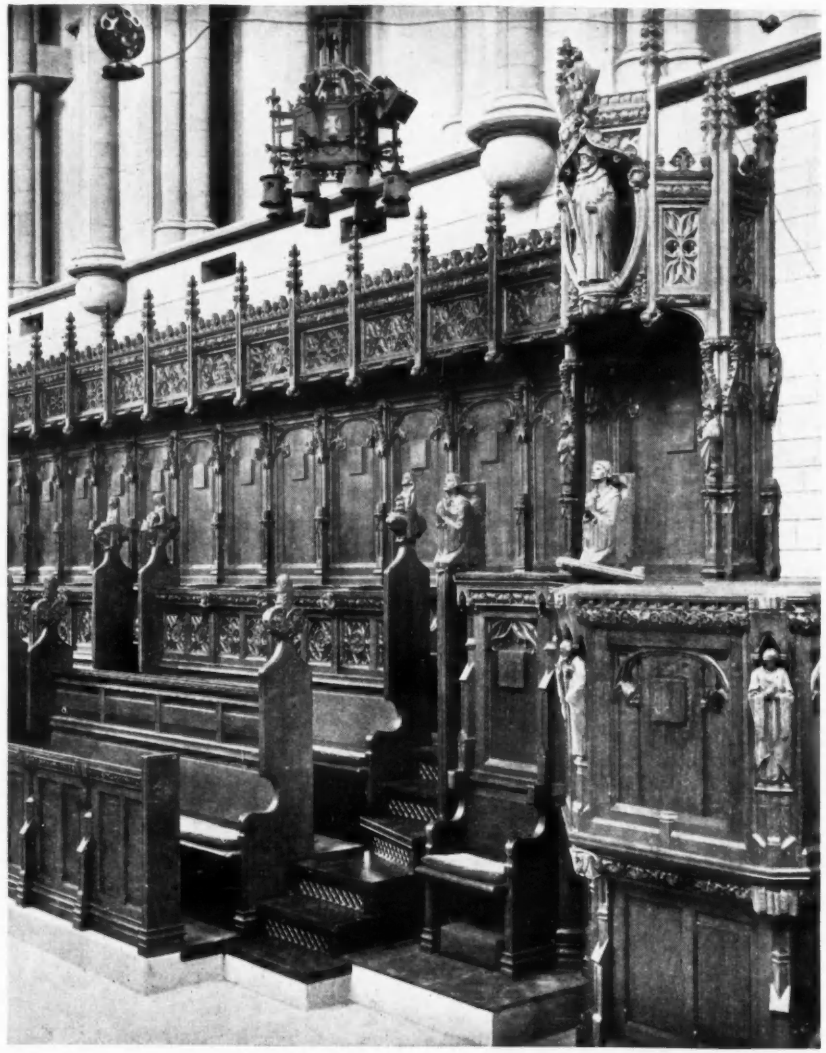
Memorial Chapel and Arts Building, Glasgow University.] [*By John Burnet, Son and Dick.*

The chancel end, looking from the west quadrangle. The building is of reinforced concrete, faced with stone externally and internally.

collegiate building as appropriate flanks. In the Arts building, the accommodation includes class-rooms and libraries, professors' rooms, dining-room, lounge, writing and common rooms.



Canopy to Vice-Chancellor's stall ; and the professors' stalls on the north wall of the Chapel. The halfits at the main stalls depict incidents in the life of St. Mungo, the Patron Saint of Glasgow.



The stalls are in Austrian oak, the lower seats being carved with foliage motifs, which are echoed in the poppy heads on the lower halfits.

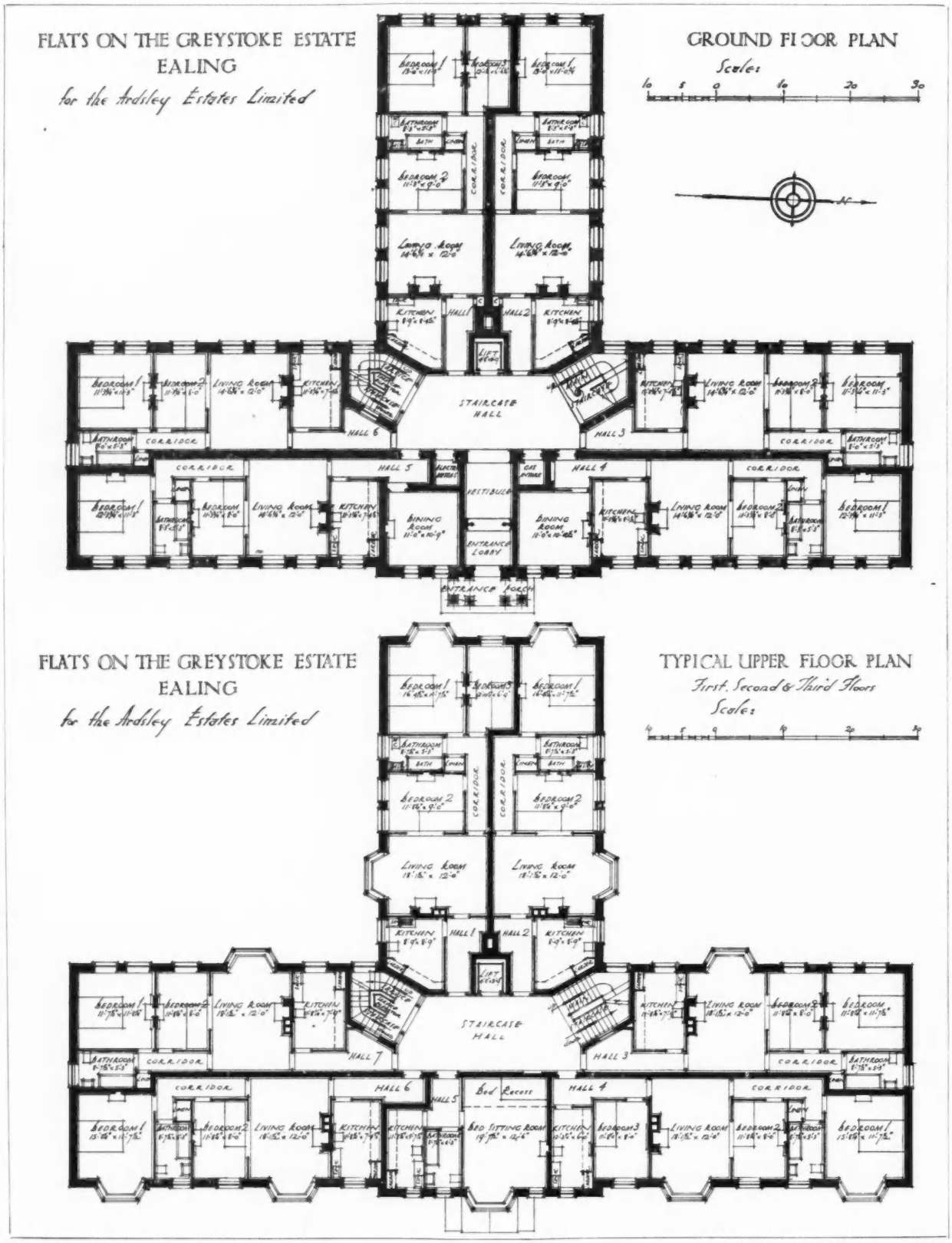






Memorial Chapel and Arts Building, Glasgow University.] [*By John Burnet, Son & Dick.*

The lectern; the organ case; and a detail view of the stalls in the chapel. The organ casing is carved, and the figures in the vessicas represent St. Cecilia and St. Francis, Patron Saints of Music, surrounded by choirs of singing birds. At the Chancellor's and Vice-Chancellor's stalls are two praying figures, while St. Kentigern and St. Columba occupy the niches in the canopies over.



Greystoke Court, Ealing, W.] [*By T. P. Bennett & Son.*

The architects' plans, at two floor-levels, of the block of flats illustrated and described on the facing and following pages.

RESIDENTIAL FLATS, HANGER LANE, EALING, W.

DESIGNED BY T. P. BENNETT AND SON

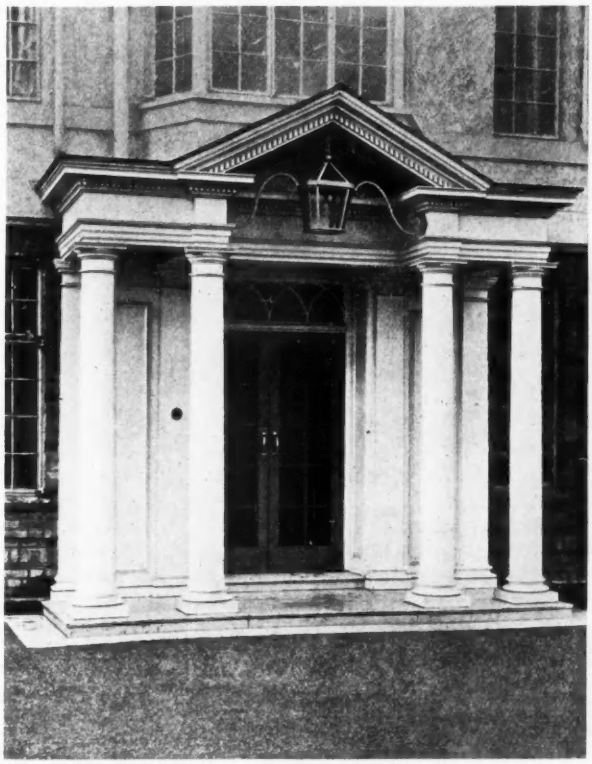


The main entrance front faces east. Twenty-seven flats of four types are provided; caretaker's accommodation is in the roof.

THE subject of these notes is a new block of flats, designed to provide accommodation of the most modern and comfortable kind for tenants of modest means. It is situated on the summit of Hanger Hill, adjacent to Hanger Hill Park and Greystoke Golf Course, and gives from its windows spreading views of the country in the direction of Northholt and beyond; yet it is within convenient reach of North Ealing and Ealing Broadway stations.

Resembling, in plan, a T, of which the crosspiece faces east, fronting on to Hanger Lane, the four-story building is constructed of brick—facing bricks, with stringcourses, up to first-floor level, and covered with stucco, brush-treated and lightly trowelled, above. Metal casement windows are employed, and the walls between those occurring in the projecting bays, which are allotted either to living-rooms or to best bedrooms, are finished with weather-boarding. The roof, within which is incorporated caretaker's residential accommodation, is in multicoloured, sand-faced tiles; the floors are of hollow tile construction.

On entering through the pillared portico, with its double-bracket lamp, a small entrance lobby gives upon a vestibule, and that, in turn, upon the spacious centrally-disposed main staircase hall, floored in marble, with passenger lift immediately facing. To the right is the chief stairway, in oak; to the left, the service stairway, in granolithic, encircling a service lift. This arrangement repeats on every floor. The flats radiate from these focal spaces, running, side by side, the length of the three limbs in the T—six on the ground floor, and seven on each of the three upper landings, where a small additional flat occupies a central position over the main entrance. Four grades of accommodation are offered, ranging from



Greystoke Court, Ealing, W. [*By T. P. Bennett & Son.*

A near view of the main doorway, which leads, in order, into an entrance lobby, vestibule and the staircase hall.

the single bed-sitting-room type, just referred to, to four rooms, with kitchen and bathroom in all cases. Those flats that include a separate living-room have therein a coal fireplace; otherwise, points and fireplace surrounds for tenants' gas and electric fires are fitted throughout.

In most cases the single living-room serves also for dining-room, but, in order to provide a separate dining apartment for occasional use, when desired, the bedroom, which will always be found adjacent, is fitted with sliding doors in the wall that divides the rooms, so as to permit of its use in an alternative capacity. A further instance of the consideration that has been taken to provide the utmost facilities in a limited space, is the proposal to equip the bed-sitting-room flats with two collapsible Murphy-in-a-door beds, folding completely out of sight, when not in use, into a recess furnished with two fitted wardrobes and a dressing-table.

In other ways, too, the equipment is singularly complete. Kitchens have built-in china cabinets, collapsible tables, ironing boards and broom cupboards. Most important of all, automatic refrigerating cabinets are provided, served by an air-compressor in the basement. The walls and woodwork are enamelled white. Cooking is, of course, by means of gas. Similar care has been taken with the bathrooms, also finished in white enamel, and provided with bath panels, and special flooring and surrounds. The baths themselves are of the built-in type, with mixer valves; and pedestal wash-basins are fitted. The metal parts of all sanitary fittings are chromium-plated, and constant hot water is available in all kitchens and bathrooms, towel-rails being incorporated in the circulation.

In general, decoration has been left to tenants' taste and care. All woodwork is enamelled, but walls and ceilings are finished only up to the plaster stage in the first instance. The staircases and entrance halls are heated by hot-water radiators. A complete system of electric bells has been installed, and telephone cables laid on to every flat, with a terminal block to receive the instrument when required. Nor has garage accommodation—an essential of modern existence—been lost sight of. It is provided adjacent to the flats, in a building capable of extension should need arise. The rents of the flats vary from £95 to £190 per annum, inclusive of rates.



Greystoke Court, Ealing, W.] [*By T. P. Bennett & Son.*

The staircase halls on all four floors are identical. This view is taken on the ground floor, looking towards the main stairs, and shows the front doors of several flats, two of which are paired on either side of the lift; as will be seen from the plans the service stairs also pair off with those seen.



ENGLISH PRECEDENT No. 93

STABLES, DODINGTON PARK, GLOUCESTERSHIRE

Note with what skill these relatively humble buildings have been invested with a spacious dignity by a purely horizontal treatment, wherein large areas of walling give monumental weight, and simple, regular openings, rhythm.

The whole thing is full of suggestions applicable to stucco, and to the type of communal housing and other such work, where economy is important and real dignity hard to come by.

—[E. MAXWELL FRY.]

PARLIAMENT, THE PUBLIC, AND "PRESERVATION"

The Lamentable Inaction of Local Authorities

SOME interesting features of the movement which is coming to be known as "Preservation" were brought out at the meeting of the Cambridge University Architectural Society held at Pembroke College last Wednesday. Mr. Percy Hurd, M.P., in an opening address, made it abundantly clear that, despite the inertia of the English character, much progress can be recorded.

AWAKENING THE PUBLIC CONSCIENCE

The immediate purpose of Mr. Hurd's visit to Cambridge was to indicate how this awakening of the public conscience to the need of "Preservation" is being focussed in Parliamentary organization and action. He himself is secretary, conjointly with Mr. P. Noel Baker, M.P., of the newly-formed Amenities Committee of the House of Commons, over which Sir Martin Conway presides. It includes a large number of members of all parties, among them, of course, being the University members. This Committee has three immediate objectives.

First, it seeks to place as quickly as possible on the Statute Book a series of Bills promoted by private members which may claim a fairly general support.

Secondly, it will urge the adoption of proposals affecting the Budget, which, seeing Mr. Snowden's known interest in the movement generally, will, it is hoped, win his support.

Thirdly, it will promote what may be called amenity objects in connection with Government measures which are shortly to be brought before Parliament and are likely therefore to pass into law.

In the present political situation, said Mr. Hurd, we cannot expect to get all we want: we must get as much as we can.

PRIVATE MEMBERS' BILLS

The first private member's Bill is the Rural Amenities Bill, standing in the name of Sir Hilton Young, tabled for discussion on February 21. Suggestions for this Bill are being put forward by the Council for the Preservation of Rural England, the National Trust, and the Commons Footpaths and Open Spaces Preservation Society, and are now in course of legal drafting for submission to the Committee. Among the subjects likely to be dealt with is the matter of advertisement disfigurement.

For instance, although there is nothing to cover the point in the Advertisement Regulations Acts of 1906 and 1925, no bye-laws are allowed by the Home Office without a reservation exempting advertisements relating to the trade or business carried on at the place of exhibition. A trading house should not be allowed to disfigure a beautiful village by ugly advertisements of a whole series of goods just because it happens to sell them. It should be enough to indicate the name of the occupier and the nature of his trade.

Another clause might seek to remedy the grievous restriction of public access to cliffs, beaches and coves by bungaloid and other enclosures—e.g., in the Lincolnshire sandhills.

The litter nuisance might be further abated by clarifying the power of local authorities as regards not only parks and open spaces and highways, but also private parks thrown open to the public and often now closed owing to the thoughtless action of a few visitors.

The acquisition of land involves complex and difficult questions, but some attempt might be made to safeguard the public from being held up to ransom by speculators and others who get possession of beautiful sites and threaten to develop them unless the public pays a fancy price. The purchases of both Stonehenge and the Seven Sisters area are instances of the evil to be remedied.

Other Bills before Parliament include the Playing Fields (Exemption from Rating) Bill, for which Mr. Macquisten has drawn a place in the ballot, and a Rights of Way Bill to simplify the law relating to proof of public rights of way.

Another possible measure is a small amendment to the Ancient Monuments Act to require permission from the Ancient Monuments Commission before old buildings of architectural merit are exported from the country.

PROPOSALS AFFECTING THE BUDGET

In regard to the second category of the immediate objectives of the Committee — namely, the Budget — many suggestions may be expected to come before the Committee. Among them is an extension of section 63 of the Finance Act of 1910 to cover all land, the preservation of which in its present state may be regarded by the appropriate authority as of sufficient value to warrant exemption from estate, legacy and succession duty.

GOVERNMENT MEASURES

The third category—namely, that affecting Government measures—covers such measures as the Town Planning Bill, which the Minister of Health intends to put before Parliament, the Transport Bill, which has just been outlined by the Minister, and the contemplated Slum Clearance Bill. Mr. Hurd made specific suggestions in regard to these Bills so far as their scope is as yet defined.

APATHETIC LOCAL AUTHORITIES

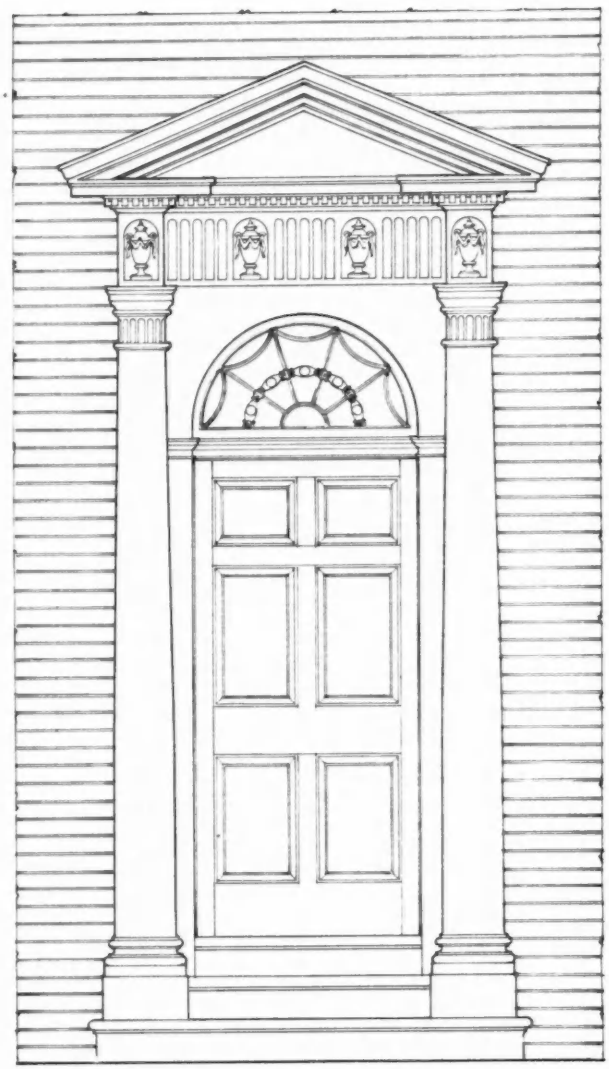
He dwelt with much emphasis, however, on what is a governing factor in the present situation—namely, the large field of action which Parliament has already provided for local authorities, but which, from lack of interest or other reasons, they have so far failed to occupy. For instance, large powers are now in the hands of the County Councils and other public authorities to deal with litter, petrol pumps, advertisement signs, rural water supplies and the reconditioning of rural cottages.

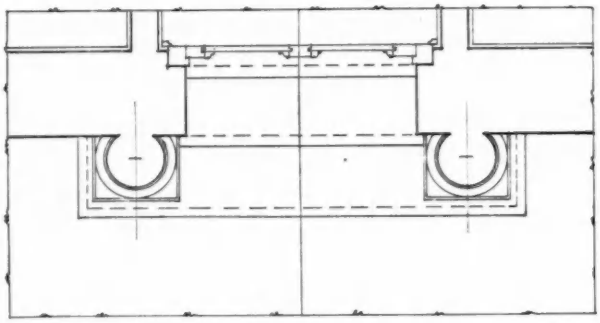
The real trouble is that public opinion has not yet made itself sufficiently felt in each locality to bring the local authorities into effective action. It is, of course, a mistake, he said, to legislate in advance of public opinion, but public opinion should be sufficiently awakened to realize the wide extent of existing powers.

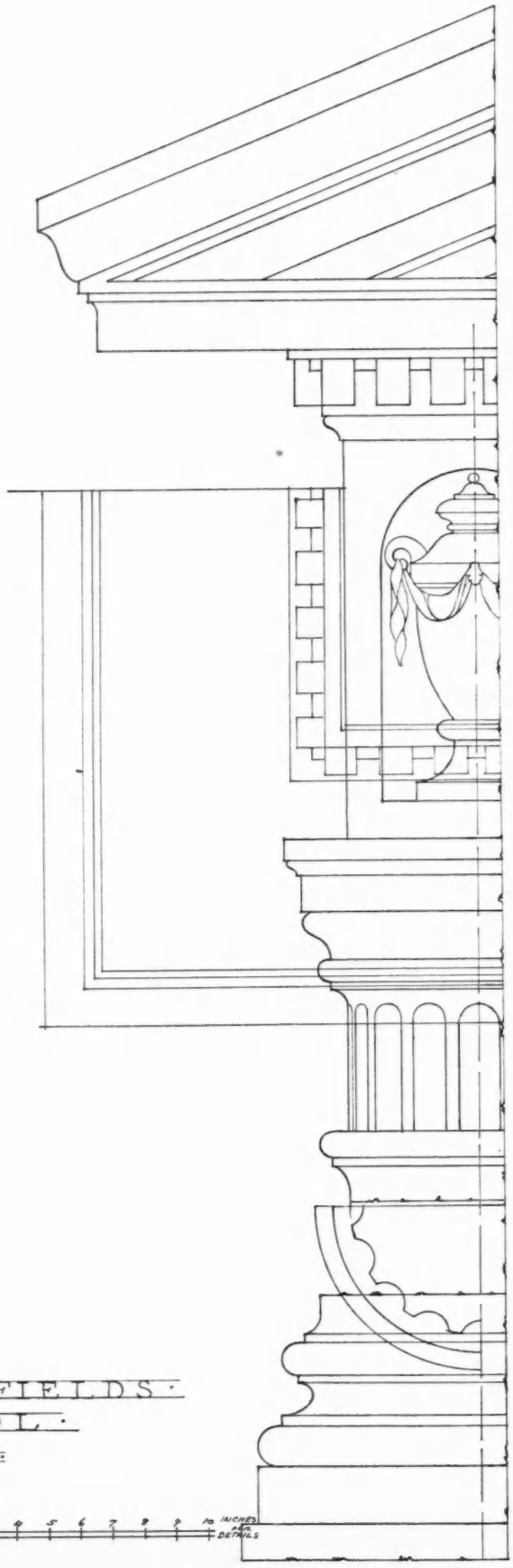
POINTS IN THE DISCUSSION

Considerable discussion followed. In reply to a question asked by Mr. H. C. Hughes, joint secretary of the Cambridge Preservation Society, Mr. Hurd gave interesting details of the working of the Housing (Rural Workers) Act of 1926. The county of Devon had made most use of the Act, 500 cottages being reconditioned at a cost of less than one-sixth of a penny in the pound on the county rate. This success had been due, he thought, to extensive co-operation between the County Councils and the Rural District Councils, a feature which is not, unfortunately, a characteristic in other areas.

Sir John Burnet and Partners have secured first place in the competition for designs for the new hospital at Ravenscourt Park for the Freemasons Hospital and Nursing Home, Chelsea.

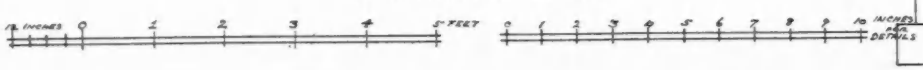


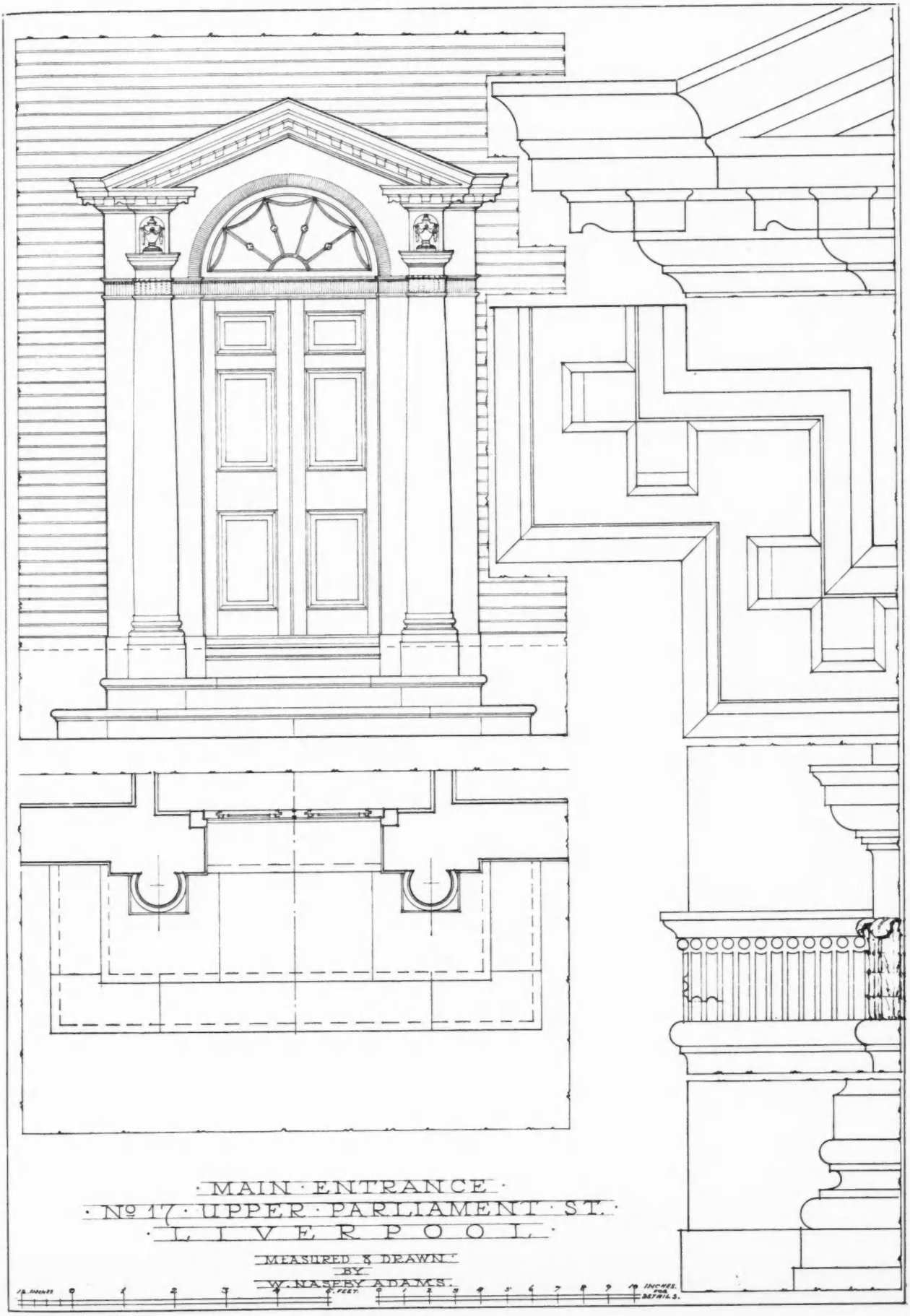




DOORWAY · SPRINGFIELDS ·
LIVERPOOL

MEASURED & DRAWN
BY
W. NASEBY ADAMS





MAIN ENTRANCE
No 17 UPPER PARLIAMENT ST.
LIVERPOOL

MEASURED & DRAWN
BY
W. NASEBY ADAMS.

MODERN SCHOOL BUILDINGS

Sir Felix Clay's New Book

As the first and second editions of Sir Felix Clay's book on *Modern School Buildings* were issued in 1902 and 1906, it will be understood that the present one, to be of service, must have been almost entirely rewritten, as is, in fact, the case. There is little to suggest that it is based on an earlier work. Most of the illustrations are of schools built during the last twenty years, and are fairly representative of recent practice in the various types of school design. The ground covered renders the book of value not only to the architect, but to all concerned in the provision of schools and the welfare of the children they provide for.

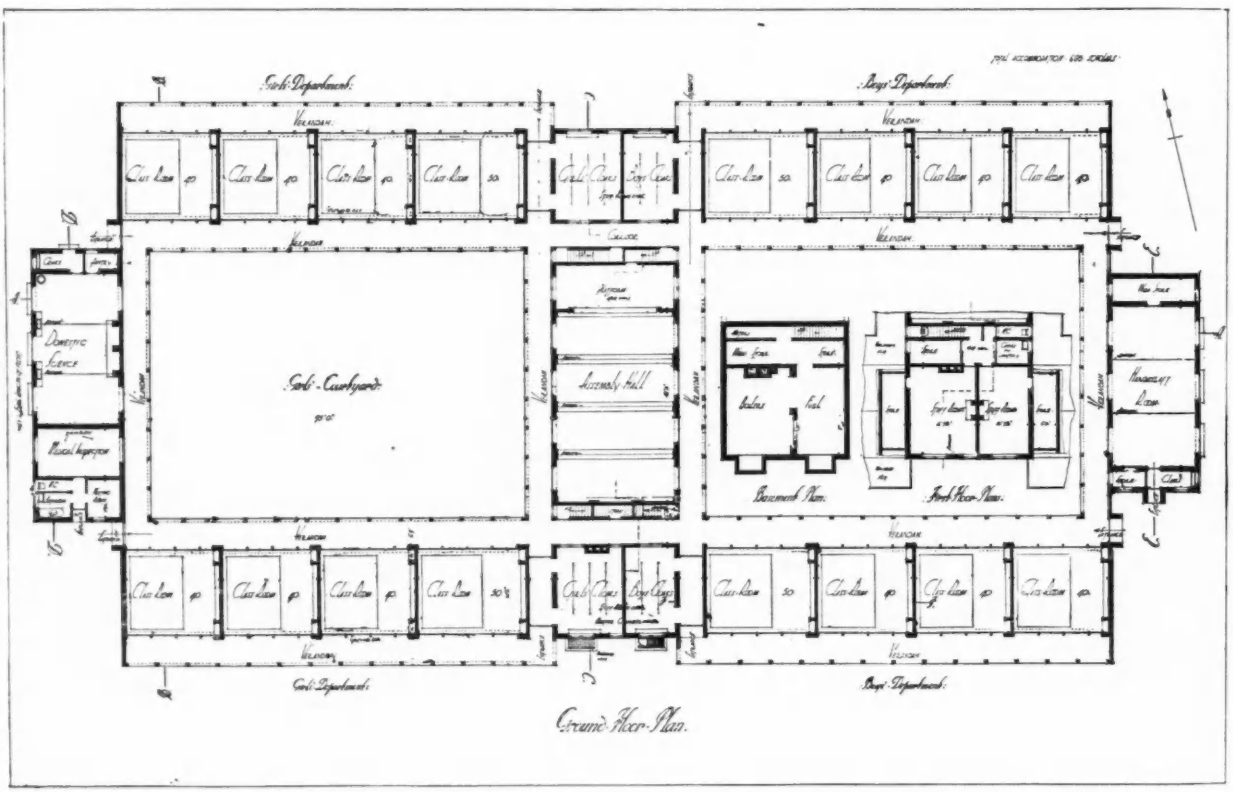
For example, practically the first question dealt with is that of cost, where the analysis shows that, while building prices have, as we know, approximately doubled, the costs of schools per head reach a higher ratio owing to the more expensive type of plan now demanded. This is largely due to the increased importance attached to the provision of plenty of natural ventilation in substitution for artificial methods. In support of this the investigations of Dr. Leonard Hill are recited, and we may assume that expenditure on these lines is fully justified in the improved health which it ensures. Recent American statistics showed that the sickness among children attending naturally ventilated schools was only 60 per cent. of that where artificial ventilation was employed.

The various types of glass transmitting ultra-violet rays are compared, together with the varying tendency to deterioration due to solarization. Schemes for both natural and artificial lighting are briefly reviewed, together with the various kinds of heating, of which that known as the "panel" system seems to hold the field at the moment.

The second part of the book deals mainly with the design of elementary schools, showing the developments in plan for the last fifty years or so. During the early 'eighties of the last century, the plan of the large elementary school became stereotyped into the central-hall type, but from 1905 onwards the growing recognition of the value of through ventilation, ample sunlight, and the advantages of a hall from which noise would not penetrate the classrooms led to the abandonment of this compact type of plan in favour of open, spread-out lines of building, arranged to catch as much sunlight as possible. Various stages mark the change, and, while comparatively few examples of the newer type date from before the war, the type was, however, then established, and the more recent buildings are in the direct line of descent from that period, though they exhibit many variations and improvements.

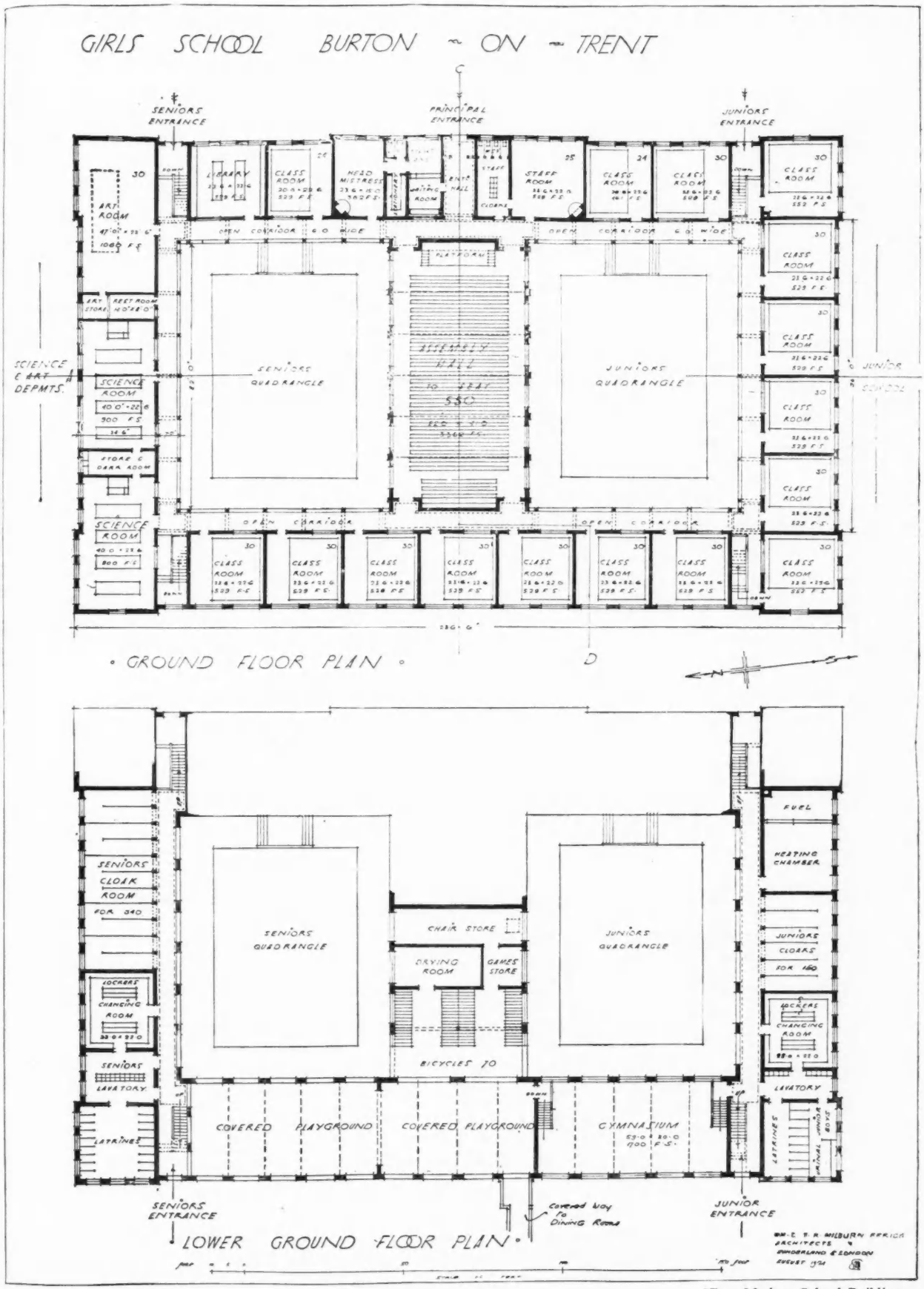
The work of Mr. G. H. Widdows for the Derbyshire C.C. has had a strong influence on modern school design, and two of his schools are illustrated, together with many others which in some measure adopt the general principles that he was one of the first to advocate—namely, the single range of cross-ventilated classrooms, with access from open verandas on either side, to which the classrooms can be opened up when the weather admits of this.

It does not look as if finality in school planning has yet been reached; the recent plans given in this work, after



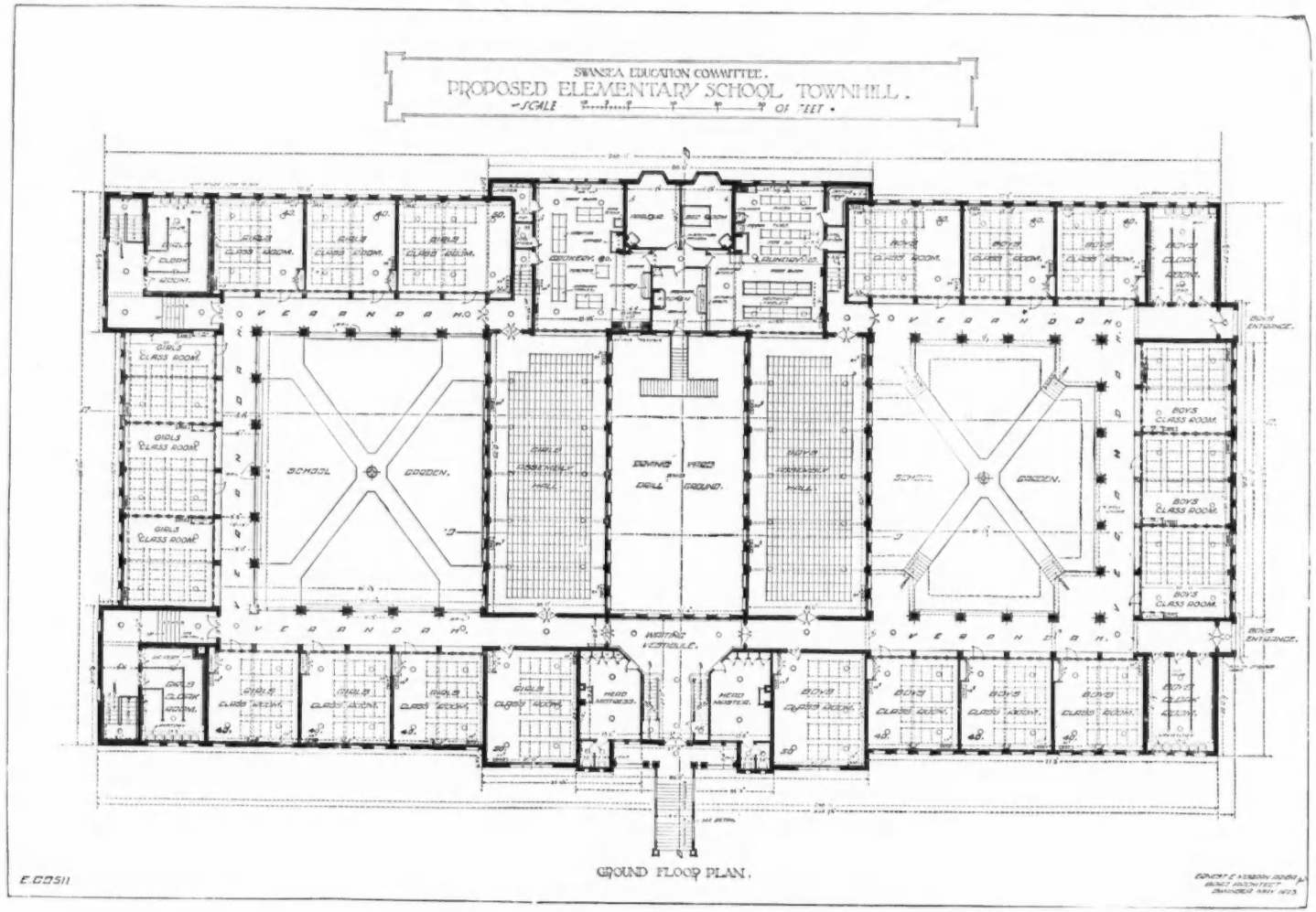
[*From* Modern School Buildings.

Middle Crofts Mixed School, Staveley, Derbyshire. By G. H. Widdows. It is lighted by a continuous steep-angled skylight, the sides of the classrooms consisting of a series of opening double doors, the upper parts being of glass; no high-level windows are provided. The school accommodates 680 scholars.



[*From* Modern School Buildings.

Girls' High School, Burton-on-Trent. By W. and T. R. Milburn. Accommodation is provided for 468 in sixteen classrooms.



[*From* Modern School Buildings

Elementary School, Townhill, Swansea. By Ernest E. Morgan. Accommodation is provided for 1,292 children in three departments of 420 boys, 420 girls, and 452 infants. The school stands on a sloping site which enabled a lower ground floor to be conveniently arranged.

making due allowance for differences in the requirements and in the expenditure admissible, show a conflict between the demands of a simple scheme for communications and those of the ideal classroom. If every classroom is to have the very best aspect and the maximum flexibility in use, the lines of access, except in comparatively small single blocks, must be extended in length, while, on the other hand, if compact planning gives short and direct corridors the rooms are not of equal value as regards aspect. In most cases compromise is inevitable, and experience only will decide as to which consideration will gain the upper hand.

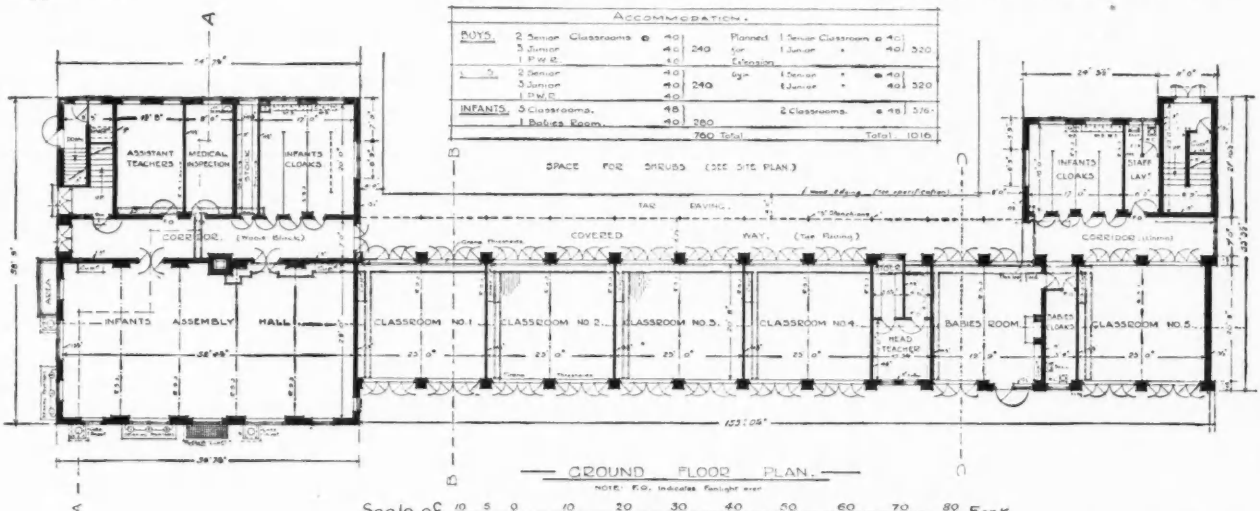
balanced. The illustrations show various ways in which this balance is achieved.

The last chapter of the book is devoted to boarding schools, but the section is unduly compressed. The large public school, and those smaller ones organized on somewhat similar lines, involve in their design many problems which cannot possibly receive adequate consideration in a dozen pages, and the impression that this section should either have been expanded or excluded is only counterbalanced by the obvious utility of the plans that accompany it.

Taken as a whole, however, Sir Felix Clay's work more than maintains its important place among the building trades.

The primary concern of the pamphlet, however, is the training of bricklayers, and the authors, as the result of their researches, conclude that while much, if not most, of the instruction now provided in our English schools is at least satisfactory, its volume is meagre.

Not the least valuable section is devoted to teaching accommodation and equipment. The workshops for bricklaying require ample space and very little else. A series of inquiries and observations made by the authors in numerous schools leads them to the conclusion that a bricklaying student needs, on an average, a space of about



[*From* Modern School Buildings.

Ealdham Square School, Eltham. By G. Topham Forrest. The classrooms are arranged to open on both sides with a continuous series of double doors. This is probably the only example of a school of this type on three floors.

The particulars of continuation schools are naturally but slight, as the Act for establishing these was in abeyance for so long that only a few have been started, and the actual type of building suitable has still to be developed. A schedule of the various technical departments is given, but these would demand variations to accord with the dominant activities of the locality. Some interesting examples of open-air and other special schools follow, and then the third part of the book, which deals with secondary schools, now so important.

Plans of typical schools of this class are given, which rather suggest that these are more easily arranged than the elementary schools by reason of the fact that a large proportion of the rooms—namely, those for technical work—can very well have a different aspect from the classrooms. This work, involving a fair amount of physical exercise, can be carried on in an atelier with a northerly aspect, and thus the plan can be economically

position as the handbook for those concerned in school building.

H. V. LANCHESTER

Modern School Buildings. By Sir Felix Clay, BT., B.A., F.R.I.B.A. B. T. Batsford, Ltd. Price 25s. net.

TRAINING THE BRICKLAYER

It is with considerable uneasiness that one begins to read *The Bricklayers' Trade and Training*, one of a series of pamphlets on technical education issued by the Board of Education. So much of the bricklayer's province has been invaded by, among others, the workers in steel and concrete—the amount of bricklaying appears still to be declining in proportion to the total volume of building—that one cannot help feeling alarmed as to the future of the craft. The investigations of Messrs. M. S. Briggs and J. L. Manson, H.M. Inspectors and the authors of the pamphlet, do much to dispel such fears, and one gladly reads that there is every indication that bricklaying will continue to occupy for many years an

50 square ft. to work in. Thus a class of twelve requires a workshop of 600 ft. sup., and a class of twenty needs 1,000 ft. sup. But this figure, it is pointed out, must be used with discretion, for much depends on the nature of the teaching given. R.

The Bricklayers' Trade and Training. Board of Education Educational Pamphlet, No. 78. (Industry Series, No. 9.) H.M. Stationery Office. Price 6d. net.

THE R.I.B.A. KALENDAR

The Kalendar of the R.I.B.A. for 1929–1930 shows that there are no fewer than 15,573 architects allied with the Royal Institute, an increase of 1,617 over the previous year. Of this number, 6,242 are members of the Institute, 898 are students, 23 subscribers, 3,689 probationers, 3,731 members of allied societies but not members of the Institute, and 990 are members of the Architectural Association but not members of the Institute.

During the year the East Anglian Society of Architects (Norwich) and

the Suffolk Society of Architects (Ipswich) have become allied with the Institute. The following four new Hon. Fellows were also elected: The Archbishop of Canterbury, the Rt. Hon. Arthur Neville Chamberlain, Viscount Peel, and the Archbishop of York.

There are now thirteen Hon. Fellows, the first three to be elected being the Duke of Connaught and Strathearn in 1879, and the Earl of Balfour, and the Rt. Hon. John Burns, in 1910.

The Fellows of the R.I.B.A. total 1,547, an increase of 70 over the previous year. The senior Fellow is John Clarke of Liverpool, who was elected in 1882. Sir John Sulman and Sir Aston Webb were elected in 1883, having become Associates in 1872 and 1874 respectively.

Associates number 2,502, an increase of 43, the earliest to be elected being R. S. Wilkinson in 1873, and E. G. Jones in 1875.

The R.I.B.A. Kalendar. R.I.B.A., 9 Conduit Street, W.1. Price 3s. 9d. net.

"THE ARCHITECTURAL REVIEW"

The accompanying illustration of the east entrance to Drayton House, Northamptonshire, is reproduced from Mr. Nathaniel Lloyd's article on "The History of the English House" which appears in the December issue of *The Architectural Review.*

The author, writing on the houses of the late seventeenth and early eighteenth centuries, says that "the architectural period from the Great Fire of London (1667) to the early years of the eighteenth century is dominated by the figure of one man—Sir Christopher Wren—whom we are accustomed to regard as our greatest architect, but whom we are apt to forget was not only a genius in his own time, but one of the greatest intellects of all time, whose abilities were not confined to architecture but were manifest in scientific attainments which would have rendered him eminent in any country in the world."

An article by Mr. A. C. Frost describes "Finella," Mr. Mansfield D. Forbes's house at Cambridge, which has been designed by Mr. Raymond McGrath. The illustrations of the house include a frontispiece reproduced in colour.

The Masonic Temple, Manchester, of which photographs and plans are published, is of special topical interest. It is one of the latest examples of the work of Thomas Worthington and Sons, of which firm Dr. Percy C. Worthington, who is a member, has been nominated by the R.I.B.A. for the 1930 Royal Gold Medal.

The craftsmanship supplement, which appears monthly, contains an article by Mr. R. W. Symonds on "Style in Furniture."

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

Captain Cazalet asked the Prime Minister whether his attention had been called to the fact that the famous Cockington Forge, Torquay, might shortly be purchased for exportation to America; and whether he was prepared to take steps for the purpose of retaining it in this country.

Mr. Lansbury, First Commissioner of Works, who replied, said that, much as he would regret the disappearance of this well-known Forge, he feared that it was not a case in which he would feel called upon to intervene under the Ancient Memorials Act.

In answer to a further question, Mr. Lansbury stated that a small committee in his department was investigating matters similar to this case with a view to placing a report before the Prime Minister.

Lieutenant-Colonel Moore asked the First Commissioner of Works whether the expenditure incurred to date on the Haig memorial statue was in excess of the original estimate of expenditure on the selection and preparation of preliminary models; and what changes had been recommended by the assessors in the model that was accepted by them.

Mr. Lansbury said that the expendi-



[*From* The Architectural Review.

The east entrance to Drayton House, Northamptonshire. The iron balustrade is in the manner of Jean Tijou, the French smith, who did much work for Wren. Attention may be drawn to the easy appearance of the ascent, an effect due to the wide landing half-way up.

ture incurred to date exceeded the original estimate of expenditure on the selection and preparation of preliminary models by £500, the amount the department had agreed to pay the sculptor for the second and larger model; the assessors had recommended that the base of the original design should be redesigned, and that modifications should be made in the equestrian group with the view of meeting certain criticisms which had been made.

Sir Kingsley Wood asked whether it had been decided to erect new blocks of Government offices on the site of Montagu House and the adjoining Richmond Terrace, and reaching from Whitehall to the Embankment; and whether he could give any estimate of the cost.

Mr. Lansbury said that final decision had not yet been reached in this matter, and in those circumstances it was not possible to give an estimate of cost.

Sir John Birchall asked the Minister of Health whether he was aware that since July the cost of building houses had been steadily rising; and, if so, to what causes he attributed the rise.

Miss Lawrence, who replied, said that was not so. The average price of houses had varied very little in recent months. It happened that in the last three months the average size of non-parlour houses showed some increase on the average area in July: the average cost per square foot had, in fact, declined since July. In the case of parlour houses, the average cost in July was abnormally low, in consequence of an unusually favourable tender having been obtained for a large proportion of the houses included in the contracts made during the month. The figures for subsequent months more nearly represented the recent normal cost of houses of this type, taking into account the variations in the size of such houses and the localities in which they were built.

Mr. Greenwood informed Miss Rathbone that the number of slum schemes completed since 1923 was 37, but final figures of cost had not yet been agreed with the local authorities.

Replying to several questions, Mr. Greenwood said that the total number of houses built in England and Wales with State assistance during the twelve months ended 30th September, 1929, was 132,144, and the number of houses having a rateable value not exceeding £78 (£105 in the Metropolitan Police District), erected without State assistance during the same period, was 71,083, making a total of 203,227. The total amount paid in housing Exchequer subsidies since 1918 was £80,874,771.

Mr. Alpass asked the Minister of Health whether, in view of the insanitary condition of large numbers of working-class houses, he would take steps to cause local authorities to expedite the inspection of such properties, with the object of having the defects remedied under the powers they possessed.

Mr. Greenwood said that from the information available in his department local authorities appeared to be fully alive to the urgency of this matter, and, having regard to the magnitude of the work which they were already doing, he was not prepared to suggest to them generally that they were not making good use of the powers which they possessed.

Mr. Greenwood informed Lord Elmsley that the position as regarded rural housing was engaging his attention in connection with the legislation he had under consideration.

Major Hills asked the Minister of Health whether his attention had been called to the danger of pollution of the Dartmoor rivers by opening china-clay works on Dartmoor; and whether he would consider, without interfering with what might be a valuable industrial enterprise, taking measures to guard against pollution of those rivers.

Miss Lawrence said that the answer to the first part of the question was in the negative. As regarded the second part of the question, the prevention of pollution was a matter for the local authorities, and no doubt this particular case would engage their attention.

Commander Southby asked the President of the Board of Trade whether, in view of the fact that the importation of cheap foreign bricks was adversely affecting the brick-making industry in this country, he would consider the desirability of a tax on foreign bricks or, alternatively, the introduction of regulations, which would make it obligatory for all foreign bricks to be marked with the name of the country of origin, in order to safeguard the interests of British brick-makers and enable the people of this country to know when they were not getting British bricks.

Mr. W. Graham said that the answer to the first part of the question was in the negative. With regard to the second part, the Standing Committee under the Merchandise Marks Act, 1926, had already under consideration an application for an Order in Council under the Act to require imported bricks to bear an indication of origin.

Mr. F. A. Coyle, L.R.I.B.A., has opened a branch office at No. 11 Saville Row, Newcastle-upon-Tyne; Telephone No.: Central 8095. He would be glad to receive trade catalogues at the above address.

SOCIETIES AND INSTITUTIONS

R.I.B.A. LONDON ARCHITECTURE MEDAL

The Council of the R.I.B.A. announce that the latest date for submission of forms for the London Architecture Medal is February 28, 1930. The award is to be made for a building completed within the County of London during the three years ending December 31, 1929. The architect of the selected building will receive a bronze medal, presented by the R.I.B.A., together with a diploma signed by the jury. A suitable tablet will be affixed to the chosen building. Forms of nomination are issued with the first two numbers of the R.I.B.A. Journal in each session.

BIRMINGHAM ARCHITECTURAL ASSOCIATION

Under the auspices of the above Association a lecture on "Slates and Slate Quarrying" was delivered to the students of the Birmingham School of Architecture and the junior members of the Association by Captain M. I. Williams-Ellis, F.INST.Q., A.M.I.M.E., and Mr. Hadleigh Seaborne, F.INST.Q. The subject was well illustrated by lantern slides.

An outline of the geological formation was given, followed by a descriptive account of slate quarrying, and the method of working to obtain the finished product. Many useful hints were given on the choice of slates.

SOUTH WALES INSTITUTE OF ARCHITECTS

Under the auspices of the above Society and the Institute of Builders (South Wales Branch), a lecture was delivered at the Engineers' Institute, Cardiff, on "Builders' Materials," by Professor W. Norman Thomas, A.R.I.B.A.

Professor Thomas gave much valuable information regarding the best materials to be used for particular purposes, and their treatment under various circumstances which, he suggested, would give the best results. References were made during the course of the lecture to instances of stone decay in various buildings in Cardiff.

THE IONIC ORDER

Sir Banister Fletcher, P.R.I.B.A., lecturing at the Central School of Arts and Crafts last Wednesday evening, traced the origin of the "Ionic Order" of architecture, and described its use by the Greeks, more especially in their colonies in Asia Minor.

Sir Banister discussed the various suggested prototypes, more or less fanciful, of the downward curving

volute. Some, he said, thought its origin may be traced to nature-forms, such as the twist of the rams' horns, or of the beautiful nautilus shell, which must have abounded on the shores of Greece; others thought it was merely a developed form of the bracket capital of primitive timber architecture; while others, again, turned to the vegetable types of Egyptian capital as the prototypes of this curved form.

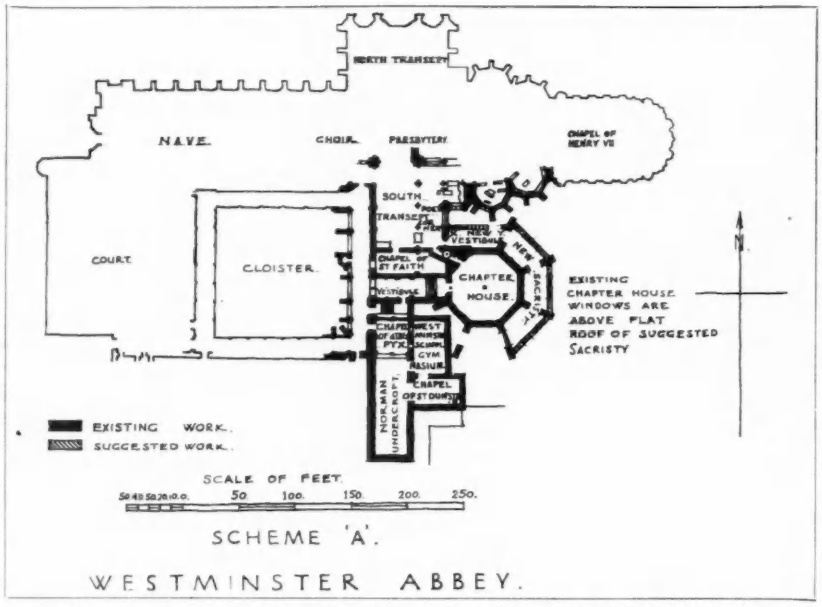
CORRESPONDENCE

THE ABBEY SACRISTY

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—In response to the invitation to submit schemes alternative to that which the Dean and Chapter favour, and to the site of Westminster School Gymnasium, I would submit the following schemes (A) and (B) :

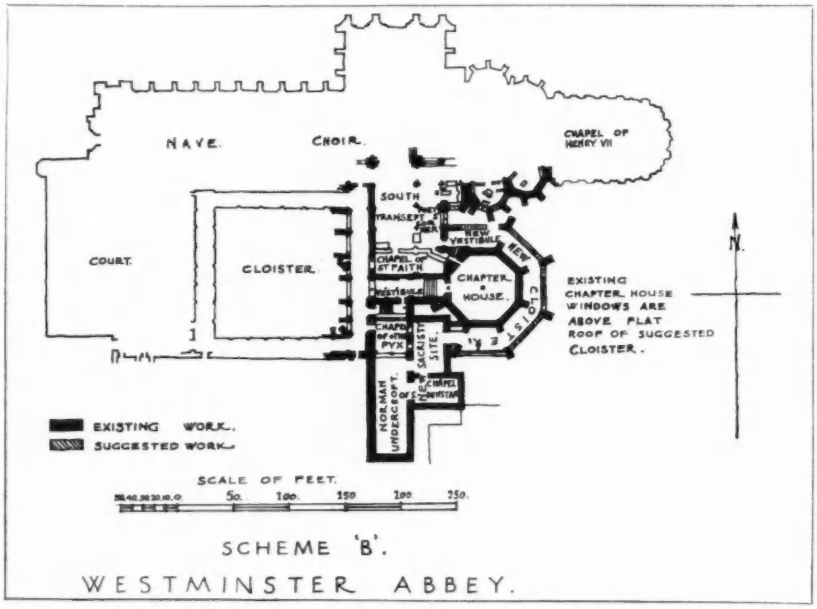
Scheme (A) : The new Sacristy to be built in three of the bays formed by the flying buttresses at the N.E., E., and S.E. walls of the Chapter House, and to be approached through a vestibule entered from the door at the east side and south end of Poets' Corner. The Sacristy to be covered with a flat roof below the cill level of the thirteenth century Chapter House windows. Here the new building would occupy that position frequently filled by cloisters, and though it would probably be necessary to build it somewhat wider than these are usually planned, it would in no way conceal the structure or function of the buttresses. Should additional height be desirable in the Sacristy, it could be obtained by allowing the floor of the vestibule to fall slightly from X to Y as shown on the sketch plan (A.)



In Scheme A, by Mr. Gilbert H. Cotton, the Sacristy is built in bays formed by the flying buttresses of the Chapter House.

Scheme (B) : This scheme provides for an alternative approach to the Westminster School Gymnasium site, presuming that it should become available, and if it should be preferred by the Dean and Chapter to that for which the model has been prepared. An enclosed Cloister would be built around the Chapter House, to be approached as in scheme (A) from Poets' Corner, and roofed with a flat roof below the cill level of the Chapter House windows. The distance to be traversed between the South Transept and the new Sacristy would be approximately seventy yards, as compared with twenty-five yards along the means of access through St. Faith's Chapel and the Chapter House Vestibule.

Dr. Foxley Norris states at length in his letter of September 12 to *The Times*, the very important objections to this latter route being adopted. Under the schemes (A) and (B), the beauty of the Chapter House and its flying buttresses should remain unimpaired. GILBERT H. COTTON



Scheme B, by Mr. Cotton, provides for an alternative approach to the Westminster School Gymnasium site.

OBITUARY

KEITH D. YOUNG : 1848–1929

It is with much regret we record the death of Mr. Keith D. Young, F.R.I.B.A., on December 1, at the age of 81. He was senior partner in the firm of Messrs. Young and Hall, architects, and was at work until within a week of his death. He was an architect who had long specialized in hospital work. More than forty hospitals were either designed or altered by him. He was consulting architect to Middlesex Hospital, hon. architect to the Royal Eye Hospital, and architect to the Hospital for Epilepsy and Paralysis. One of the founders of the Mansion House Council on the Dwellings of the Poor, he had acted as its hon. architect for forty-five years. He had been a Fellow of the R.I.B.A. since 1885, and was the author of several books on architecture. The work of the firm will continue under the

control of the remaining partners, Mr. A. W. Hall and Mr. F. J. Humphry, and for the time being the name of the firm will remain unchanged.

TRADE NOTES

At the Smithfield Show, 1929, now being held at the Royal Agricultural Hall, London, until December 13, Messrs. Ruston and Hornsby, Ltd., of Lincoln, have a good show of oil engines and agricultural machinery. A new feature of their oil engine section is a 2-b.h.p. totally enclosed petrol engine, specially designed for driving elevators and other machinery where the atmosphere is laden with chaff, dust and dirt. The valve gear, magneto and all wearing parts are fully enclosed. Disc flywheels are fitted to prevent the accumulation of straw, etc., which might cause trouble in the case of an ordinary flywheel. The engine is arranged to run on petrol, the exhaust valve is operated by a push rod, and the air valve is automatic. Two disc flywheels are fitted to ensure steady running. The main bearings and connecting rod big end bearings are lubricated by grease cups.

The Cement Marketing Company Ltd. have been experimenting for some time with the object of producing a coloured cement which, while possessing all the advantages of "Ferrocrete," the rapid hardening Portland cement, could be marketed at a price to enable architects and others interested in constructional work to vary the colour of concrete at a negligible additional cost. The result of these experiments is now embodied in the new cement which the firm are placing on the market under the registered title of "Colorcrete."

The advantages claimed to be obtained from the use of "Colorcrete" are as follows: (1) It produces a concrete of a neutral and pleasing tone; (2) It is guaranteed to be equal to "Ferrocrete" in quality; (3) The price will enable it to be used for ordinary purposes.

"Colorcrete" will enable the carriageway to be laid so that it has the appearance of well-consolidated gravel. When used for general concrete work, such as garage approaches, footpaths, crazy paving and surrounds to houses, it is claimed to enhance the appearance of the property, and, in addition, to give a pleasing effect to stucco.

For seaside work generally it is claimed that "Colorcrete" should be particularly useful where it is desired to depart from white or grey for cast stone, where this particular shade of reconstructed stone is required.

The use of aggregates of various colours will, of course, give different effects, but the ordinary gravel and sand commonly used, it is claimed, will give a very pleasing appearance when mixed with "Colorcrete." The material is intended to be sold and used for general utility purposes, and not to be limited to work of a particular style or character.

The whole range of the prices of Ibus boards has been reduced by about 25 per cent., yet the standard of the product, it is claimed, will be rigidly maintained. Concurrently with this, the existing distributing arrangements whereby the sale was confined to four firms of importers have been terminated, and we understand that Ibus will in future be obtainable from every importer stocking this kind of plywood.

THE BUILDINGS ILLUSTRATED

Following is a list of the specialists, contractors and some of the sub-contractors for the buildings illustrated in this issue:

New Chapel and Arts Building, Glasgow University (pages 906-911). The work was let in separate contracts. Specialists: Walter Gilbert, modelling for stone carving; Archd. Dawson, modelling for wood carving and internal fittings; John Dansken and Purdie, F.F.S., surveyors; Alex. Ramsay, consulting engineer for electrical work; John Martin, clerk of works; James Young, stone carving. Contractors: John Train & Co., Ltd., excavator, mason, brick and steel works; John Cochrane, carpenter, joiner and ironmongery works, oak seats with canopies, organ casing and internal fittings; John Anderson, slater work; Archd. Low and Son, Ltd., plumbing and gas-fitting work; Wm. Tonner and Son, plaster work; Robt. Brown and Son, Ltd., tile and terrazzo works; Galbraith and Winton, Ltd., marble work in chancel; George Wragge, Ltd., metal casements; Melville, Dundas and Whitson, reinforced concrete floors, beams and columns; The City Glass Co., Ltd., glazier work; Ashwell and Nesbit, Ltd., heating and ventilating; Claud Hamilton, Ltd., electric lighting and fittings; George W. Sellars and Sons, painter work; Bennett Furnishing Co., Ltd., oak chairs in chapel; Carron Company, kitchen equipment; Henry Willis and Sons, Ltd., new organ; Gibson and Goold, fireplace work.

Greystoke Court, Ealing (pages 912-914). General contractor, Fretho, Ltd. Subcontractors: H. Young & Co., structural steel; Aerocrete Partition Blocks, partitions; Wm. Freer, Ltd., central heating; Gas Light and Coke Co., gasfitting; Eng. Works Electrical and General, Ltd., electric wiring, electrical heating and bells; Lindsay Saville, electric light fixtures; Leeds Fireclay Co., sanitary fittings; Girlings Ferro Concrete Co., stair treads; John Line and Sons, wallpapers; Bratt Colbran, and the Heaped Fire Co., mantels and fireplaces; W. T. Lamb and Sons, facing bricks; Cement Marketing Co., Ltd., "Snowcrete," external stucco; John Thompson Beacon Windows, casements; Anselm Odling and Sons, Ltd., Sicilian and Travertine marble in steps and entrance hall; Caxton Floors, Ltd., patent floor construction; Hammond Bros. and Champness, lifts; Duncan Tucker, joinery; Frigidaire, Ltd., automatic electric refrigeration; Henderson, sliding doors gear; Bells Asbestos Co., bath panels and floor.

COMPETITION CALENDAR

December 14. The General Electric Company, Ltd., is to erect a "Pavilion of Light," including a suite of six rooms, at the 1930 *Daily Mail* Ideal Home Exhibition at Olympia, Kensington, S.W. The lounge, dining-room, bedroom, and nursery will be the subjects of one section of the competition for architects and decorative artists, while the kitchen and bathroom will be the basis of another for electrical contractors, with the object of demonstrating the ideal use and security of electrical equipment in these rooms. The assessors are Sir Edwin Lutyens, R.A., Sir Duncan Watson, Messrs. Philip Connard, R.A., Oliver P. Bernard, Douglas G. Tanner, and G. G. Wornum. Prizes will be awarded in three sections as follows: (1) Architects and artists—1st prize, £100; 2nd prize, 20 guineas; ten consolation prizes of ten guineas each for next best work. (2) Electrical contractors—1st prize, 50 guineas; ten consolation prizes value ten guineas each. There will be ten prizes of five guineas for the best Period Designs of Electric Light Fittings. Drawings to be sent to *Daily Mail* Electrical Competition, Carmelite House, London, E.C.4, not later than December 14.

January 1. Municipal Pavilion with Refreshment Rooms and other conveniences on the site of the old Waterloo Hotel, at the corner of the Marine Parade and Terrace Road, Aberystwyth. Assessor: Arnold Thornely, F.R.I.B.A. Premiums: £100, £70, and £30. All designs must be sent to the Borough Surveyor, Corporation Offices, Smithfield Road, Aberystwyth, not later than January 1, 1930.

January 31. For laying-out a portion of the Stokes Bay area as a pleasure resort with public walks and pleasure grounds, for the Gosport Town Council. Application for plan of the estate and a copy of the conditions, with particulars of the prizes offered, will be forwarded on application to H. R. Mangnall, Town Clerk, Town Hall, Gosport. Deposit £2 2s. Latest date for submission of designs: January 31, 1930.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

35317. Cowper, E. O. Materials for sports grounds, buildings, etc. November 19.

35811. Freyssinet, E. Structural elements. November 22.

35163. Kopelowicz, B. J., and Kopelowiczowa, L. Building construction. November 18.

ABSTRACTS PUBLISHED

321662. Bourdelles, L. Building block or unit.

320132. Roofs, portable buildings. Nissen, P. N., and Nissen Buildings, Ltd., Rye House, Hoddesdon, Hertfordshire.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BERMONDSEY B.C. is borrowing £17,200 for the acquisition of land in Page's Walk, for re-housing persons displaced by the Vaughan Street improvement scheme, which is now being dealt with.

Messrs. Watney, Combe, Reid & Co. Ltd., are to erect a public house in Deansbrook Lane, HENDON.

The Lewisham B.C. has prepared plans for the erection of sixty flats at Winchfield Road SYDENHAM.

Plans passed by the LEWISHAM B.C.: 120 houses, Downham Estate, for Mr. J. G. Stephenson; nine houses, Callander Road, for Mr. H. R. Watt; twelve houses, Thorpewood Avenue, for Mr. G. T. Harman; twenty houses, Malyons Road, for Mr. P. B. Dannatt; nine houses, Longton Avenue, for Messrs. Higgins Bros.; two houses, Ewelme Road, for Mr. E. W. Wallis; eighty-two houses, Selworth Road, for Messrs. Walter Hall and Sons, Ltd.; twenty-two houses, Holmesley Road and Daneby Road, for Mr. James Watt; school, Moorside Road, for Mr. J. N. P. Conlan; premises, Nightingale Grove, for Messrs. W. H. Gaze and Sons, Ltd.

The L.C.C. Education Committee is acquiring property in Beresford Street, SOUTHWARK, in connection with a proposal for the reconstruction of the Ruskin School.

Plans passed by the SOUTHWARK B.C.: Garages, rear of 42 New Street, for Mr. R. Elsey Smith; extension of building, Broadwall, for the superintending architect, L.C.C., on behalf of the London School of Printing; building, Comus Place, for Mr. H. Dicksee.

The L.C.C. has obtained power compulsorily to acquire a site of 5½ acres of land at STAMFORD HILL, for the erection of tenements.

H.M. Office of Works is to erect a telephone exchange in Kingston Road, WIMBLEDON.

Plans passed by the WIMBLEDON Corporation: Extension of test room, Corporation electricity generating station, Durnsford Road, for Mr. A. E. McKenzie; twelve houses, Toynbee Road, for Messrs. H. Coombs and Sons; additions, St. Mark's Church, St. Mark's Place, for Messrs. R. J. and J. S. Thomson; house, Somerset Road, for Messrs. G. E. Wallis and Sons, Ltd.; two houses, Highbury Road, for Mr. A. H. Jones; alterations, Wimbledon Common Golf Club, Camp Road, for Mr. H. F. Gardner; six houses, Copse Hill, for Mr. A. E. Pierce; extension to bakery, Mansel Road, for Mr. F. H. Doel; showroom and offices, 413 Durnsford Road, for Messrs. G. W. Beattie, Ltd.; house, Ellerton Road, for Messrs. G. H. Carter, Ltd.; squash rackets court, Ellerton Road, for Messrs. G. H. Carter, Ltd.; five shops and flats, Coombe Lane, for Mr. E. G. W. Souster.

SOUTHERN COUNTIES

The EASTBOURNE Corporation has obtained sanction to borrow £9,472 for the provision of turkish baths.

The EASTBOURNE Corporation is considering a slum clearance scheme in the Longstone Road district.

The EASTBOURNE Corporation is considering the purchase of twenty-three acres of land at Hampden Park for housing purposes.

Plans passed by the EASTBOURNE Corporation: Two houses, Le Brun Road, for Mr. A. J. Fellows; alterations, Y.M.C.A., Langney Road, for Mr. B. Stevens; alterations, 65 and 66 Royal Parade, for Messrs. M. Martin and Sons; Salvation Army hall, Royal Sussex Crescent, for Mr. O. Archer; six houses, Percival Road, Hampden Park, for Mr. B. Stevens; four houses, Chamberlain Road, for Mr. J. Bowley; alterations, Mostyn Hotel, Grand Parade, for Messrs. J. Bainbridge and Son; two houses, Park Avenue, for Mr. F. C. Benz; alterations and additions, 158 Terminus Road, for Messrs. P. D. Stonham and Son; alterations and additions, premises, junction of Tideswell Road and Terminus Place, for Messrs. Scales and Baker; alterations, Albion Hotel, Seaside, for Messrs. P. D. Stonham and Son; additions, 5 and 6 Sussex Gardens, for Messrs. Woolworth, Ltd.; additions, Beachy Head Hotel, for Messrs. P. D. Stonham and Son.

The GUILDFORD Corporation has decided to grant the Surrey Education Committee a site in Stoke Park, for the erection of a new technical institute

SOUTH-WESTERN COUNTIES

In connection with the proposal for the erection of municipal buildings on the College Green site, the BRISTOL Corporation recommends the acquisition of additional property, which will necessitate a re-housing scheme.

The PLYMOUTH Corporation has sanctioned an estimate of £26,000 for the erection of fifty-eight houses at North Prospect.

The PLYMOUTH Corporation has obtained sanction for a loan of £8,000 for the construction of a culvert at Pennycomequick.

The PLYMOUTH Corporation has obtained sanction to borrow £18,000 for the erection of a nurses' home at the Blackadon Institution.

Plans passed by the PLYMOUTH Corporation: House, Venn Grove, for Miss Bryan; two houses, Beacon Down Avenue, for Messrs. T. Doney and Son; boiler house, etc., Cromwell Road, for Seymour Laundry Co., Ltd.; three bungalows, junction of Salcombe Road and Prince Maurice Road, for Mr. J. Rendle; nine houses, Watts Park Road, for Mr. J. Neal; alterations, North Road, for the trustees of the Seventh Day Adventist Church; twelve houses, Elmfield Road, for Mr. W. Andrews; two houses, Burnham Park Road, for Mr. A. Manning; alterations, 13 and 14 Portland Villas, for the Committee of the Church Army Work-Aid and Lodging Hostel.

Plans passed at POOLE: Addition to dwelling house, Highwood Road, for H. G. Champ; dwelling house, Woodlands Avenue, for J. Jagger; shop and stores, Ringwood Road, for Reynolds and Tomlins; garage, "Dunecrest," Banks Road, for W. B. Budden; greenhouse, "Pineways," Canford Cliffs Road, for H. J. Hillman; garage, Pinewood Road, for H. Solomon; extension to loggia, Mornish Road, and dwelling house and garage, Canford Cliffs Road, for T. F. Grimes; amended plan of lock-up shop, Poole Road, for F. J. Marks; four dwelling houses, Woodlands Avenue, for Bartlett and Whiffen; extension to dining room, "The Haven Hotel," Banks Road, for H. R. Collins; garage addition to dwelling-house, Upper Gordon Road, for Brailsford and Wood, Ltd.; pair semi-detached dwelling houses, Binnie Road, for Philpotts and Manners; addition to dwelling house, "Alfgaleh," Ravine Road, for H. J. Hillman; addition to dwelling house, "Hillcrest," Banks Road, for G. Wilson; dwelling house and garage, Elms Avenue, for N. H. Hibbs; proposed new road off Hunt Road, for Maggs and Maggs; two dwelling houses, Pine Avenue, for S. G. Ward; four dwelling houses, Gloucester Road, and dwelling house, Mayfield Avenue, for Philpotts and Manners; alterations, Ideal Home Dairies, Ltd., Queen's Road, for Ideal Home Dairies, Ltd.; two dwelling houses, Pine Avenue, and amended plan of two shops and two dwelling houses, Alder Road, for S. G. Ward; garage, North Road, for H. Kendall; addition and enclosing of verandah, "Darenth," Chaddesley Road, for R. C. Webber; two dwelling houses, Cliff Drive, for O. R. Mulley; two dwelling houses, Harbour Hill Road, for Bartlett and Whiffen; two lock-up shops, Haven Road, for H. J. Hillman; five pairs semi-detached dwelling houses, Alexandra Road, for Brailsford and Wood, Ltd.; sale rooms (twenty-four), Layton Road, for E. Knott; alterations to "Oak House," The Avenue, for H. R. Collins; dwelling house and garage, corner Western Avenue and Bury Road, for T. F. Grimes; proposed depository, Rosemary Road, for H. Ventress; addition (shop) to dwelling house, Wimborne Road, for Crabb and Crabb; dwelling house, corner Albert Avenue and Albert Crescent, for J. Jagger; dwelling house, Canford Cliffs Road, for Keane and Sons; addition (porch) to dwelling house, Beresford Road, and dwelling house, Harbour Hill Road, for A. G. Gray; garage and store, Sandbourne Road, for G. Norman; dwelling house, Western Avenue, for A. Barnes; dwelling house, Mayfield Avenue, for O. R. Mulley; dwelling house, Buckingham Road, for C. J. Wellman; two dwelling houses, Ringwood Road, and two dwelling houses, Dorchester Road, for Corbin and Clark; four dwelling houses, Whitecliffe Road, for S. C. Rowden; office, Rosemary Road, for Brixey and Good; dwelling house, Victoria Road, and dwelling house, Livingstone Road, for M. J. Lawford; addition (showroom) to shop and dwelling, 281 Ashley Road, for F. G. Nutt; verandah addition to dwelling house, "Athlvain," Fernside Road, for A. M. Grimmett; conversion of pair semi-detached dwelling houses into one dwelling house, 22 and 24 Hermitage Road, for W. Baker; dwelling house, Whitecliffe Road, for Brailsford and Wood, Ltd.; dwelling house, Winston Avenue, for H. Hardy; conversion of dwelling house into shop and one lock-up shop, Wimborne Road, for R. C. Belben; addition to dwelling house, "Montana," Burton Road, for E. F. Knight; dwelling house, Twemlow Avenue, for C. J. Barfoot; dwelling house, Brownsea Road, for J. E. Fancy; medical block, additions to dormitories, kitchen, lavatories, W.C.'s and new open air class room, The Shaftesbury Homes, Constituti on Hill Road, for G. Hobden; garages (two), rear "Park Garage," Bournemouth Road, for Mrs. M. E. Zunino; pair semi-detached dwelling houses, Mossley Avenue, for W. H. Haywood; two dwelling houses, Ponsonby Road, for Brailsford and Wood, Ltd.; dwelling house, Binnie Road, for Philpotts and Manners; additions to dwelling house, "Heather Glen Cottage," Western Road, for E. W. Kingsbury and Sons; garage, "Inglenook," Parkside Road, for Mrs. S. Long; store, Mannings Heath Road, for W. Cross; garage,





The Garth, Thurcaston, near Leicester. Designed by E. J. Williams. The main front (left) and the garden front (right). The building is of hand-made Dutch bricks, with a tiled roof. The dressing to the doorway is of stone. On the left of the main front can be seen the garage. For ground and first floor plans see page 929.

Springfield Crescent, for Mrs. M. Burn-Callender; garage, rear "Ricky Lodge," corner Bournemouth Road and Marlborough Road, for F. Cleur; entrance porch, "Ramadi," Bourne Vale Road, for H. C. Drake; garage, rear of "Oporto," Morrison Avenue, for D. H. Ridout; addition to office and W.C., Alder Road, for W. H. Carr; garage, Boulnois Avenue, for F. W. Burton and Sons; garage, rear "Glastonbury," Parkstone Avenue, for Mrs. A. S. Wyard; addition to garage and workshop, Longfleet Garage, Fernside Road, for J. Harris; amended plan of garage, "Salterna Lodge," corner Sandbanks Road and Brownsea View Avenue, for Miss M. R. Twist; extension to garage, "Farcroft Cottage," Cranbrook Road, for Mrs. M. Morgan; garage, 2 Hop Cottages, Dunford Road, for H. Vatcher; milks tore, rear 3 Glencoe Road, for S. A. Collins; store, rear 94 Wimborne Road, for H. Kendall; store and workshop, rear "Lakeside," Churchfield Road, for J. P. Baines; garage, rear "Alkham," Constitution Hill Road, for E. S. Good; garage, Harbour Hill Road, for J. Jagger; garage, Sheringham Road, for H. Rixworthy; garage, rear 19 Haven Road, Canford Cliffs, for Rumsey and Rumsey; garage and garden store, Blandford Road, for E. Houlton; amended plan of garage, "Bramley," Dorchester Road, for E. W. Budgen; garage, rear 17 Wimborne Road, for W. A. Cure; garage, Morrison Avenue, for J. Giles; amended block plan of garage and workshop, Ringwood Road, for H. Bennett.

MIDLAND COUNTIES

The BIRMINGHAM Education Committee is to borrow £9,300 for the extension of Sladefield Road council school.

The BIRMINGHAM Education Committee has purchased a site at Twickenham Road, Perry Barr, for the erection of an elementary school.

The BIRMINGHAM Corporation has acquired a site in Holyhead Road, Handsworth, for the erection of a branch municipal bank.

H.M. Office of Works has acquired land in Staniforth Street and Corporation Street, BIRMINGHAM, for the erection of telephone and employment exchanges.

Plans passed by the DUDLEY Corporation: House, Oakham Road, Dudley, for Mrs. A. Preedy; house, Bowling Green, Netherton, for Mr. J. H. Willetts; alterations, "British Oak" Inn, Union Street, Netherton, for Messrs. Julia Hanson and Sons, Ltd.; store, 10 Wellington Road, for Messrs. Griffin Bros.

The DUDLEY Corporation is negotiating for a housing site in the vicinity of Cradley Road.

The DUDLEY Education Committee is to erect an elementary school at Dudley Wood at a cost of £8,000.

The STOKE city engineer has prepared a lay-out of that portion of the Carmountside estate which has been allocated for housing purposes.

The STOKE-ON-TRENT Corporation is negotiating for 25 acres of land at Norton for a housing scheme.

NORTHERN COUNTIES

The BIRKENHEAD Corporation has obtained a site adjoining Alpha Drive, Rock Ferry, for the erection of a central school.

The BIRKENHEAD Education Committee has received sanction to borrow £9,141 for the erection of an elementary school in Gautby Road.

Plans passed by the BIRKENHEAD Corporation: Alterations and additions, 99 Shrewsbury Road North (amended plan); alterations, 86 Argyle Street; alterations to business premises, 538 Chester Road; store, Chemical Packing Works, Corporation Road; heating chamber, rear of 269 Old Chester Road; twelve houses, Storeton Road.



The Garth, Thurcaston, near Leicester. The staircase looking up towards the half-landing. On the left is a part view of the garden exit.

Plans passed by the BOLTON Corporation: Two houses, Horrocks Fold Avenue, for Messrs. A. H. Price and Groves; extensions, Herbal Brewery, off Morris Green Lane, for Mr. James Scott; six houses, Smethurst Lane, for Mr. John S. Hughes; eleven houses, Danesbury Road, for Mr. Albert Coward; two houses, Harpers Lane, for Messrs. Yates and Partington; twelve houses, Walker Avenue, for Messrs. Bleakley and Wesley; four houses, Devonshire Road, for Messrs. Haddock and Bowling; two houses, Brook Hey Avenue, for Mr. James Latham; two houses, Regent Road, for Mr. D. Wynne Thomas; ten houses, Thornton Avenue, for Mr. F. E. Thornton; transformer chamber and smithy, Lincoln Mills, Washington Street, for Messrs. R. Entwistle & Co., Ltd.; office and store, Endon Street, for the Star Auto-Engineering Co.; six houses, Furness Avenue, for the Housing Committee; six houses, Red Lane, for Messrs. Crank and Silson; house, Dalegarth Avenue, for Mr. Harry Peers.

The managers of the Endsleigh Holy Child Roman Catholic School, HULL, are to extend the premises to accommodate a further 200 juniors.

The HULL city architect has prepared plans for the provision of additional office accommodation at the Guildhall, at a cost of £8,500.

The managers of the St. Mary's Roman Catholic School, HULL, are to erect a school for 440 seniors in Dansom Street.

The HULL Education Committee is to erect an elementary school for 1,280 children at Middleburg Lane.

The HULL Corporation has obtained sanction to proceed with the erection of blocks of flats on the Madeley Street, Barnsley Street, and Southcoates Lane sites, at a total cost of £55,739.

The HULL Corporation has obtained sanction for a loan of £60,000 for a rehousing scheme rendered necessary by the construction of a new street from Paragon station to Beverley Road.

Plans passed by the HULL Corporation: Four houses, Gillshill Road, for Mr. S. Bays; six houses, Gillshill Road, for Mr. G. H. Needler; four houses, Gillshill Road, for Mr. R. Ashton; two houses, James Reckitt Avenue, for Mr. R. Finch; two houses, Tween Dykes, Sutton, for Messrs. F. Sewell and Son; two houses, Gillshill Road, for Messrs. G. T. Spruit and Son; school, Westcott Street, for the Corporation Education Committee; four houses, Ings Road, for Mr. H. Needler; two houses, Ellesmere Avenue, for Mr. F. Singleton; fourteen houses, James Reckitt Avenue, for Messrs. Simmonite, Curtis and Holtby; house and shop, Gillshill Road, for Mr. G. H. Needler; house and shop, Gillshill Road, for Mr. S. Bays; six houses, Pickering Road, for Mr. D. Smith; eight houses, Goddard Avenue, for Mr. E. Mowforth; four houses, Bricknell Avenue, for Mr. T. R. Barnett; six houses, Strathmore Avenue, for Messrs. Loveridge and Taylor; two houses, Bricknell Avenue, for Mr. T. R. Barnett; four houses, Goddard Avenue, for Mr. A. Johnson; joiners' shop, National Avenue Works, for National Radiator Co.; two houses, Boothferry Road, Hessle, for Mr. C. H. Markham; six houses, Silverdale Road, for Mr. G. Overton; three houses, First Lane, Hessle, for Mrs. L. Scholar; two houses, Riversdale Road, for Mr. B. Barnaby; shop fronts, 361 and 363 Beverley Road, for Hull House Co., Ltd.

At a meeting of the LEEDS Corporation Municipal Accommodation Committee, the City engineer referred to suggested schemes for the provision of additional municipal accommodation. The Committee adopted a preliminary scheme for the erection of a building at the junction of Park Lane and the west side of Cookridge Street, for the provision of accommodation for council chamber, Lord Mayor's rooms, committee rooms and offices. The cost is estimated at £360,000.

The LEEDS Corporation has voted £15,000 for the erection of electricity sub-station buildings.

The LEEDS Corporation is seeking sanction to borrow £66,500 for the erection of baths and washhouses at Carr Crosts, Armley.

The OLDHAM Corporation Gas Committee has approved the report and scheme submitted by the engineer for the suggested reconstruction of the Higginshaw gasworks at an estimated cost of £170,000. The Committe has asked the engineer to prepare the necessary plans and estimates.

Plans passed by the OLDHAM Corporation: Extensions, nurses' home, Royal Infirmary, for the Governors; alterations, Duke of York Inn, Rochdale Road, for Messrs. Wilsons Brewery Co.; two shops, Copster Hill Road, for Messrs. H. Partington and Sons; new business premises, Market Place, for Messrs. Freeman, Hardy and Willis; shop, Market Place, for Mr. P. Cohen.

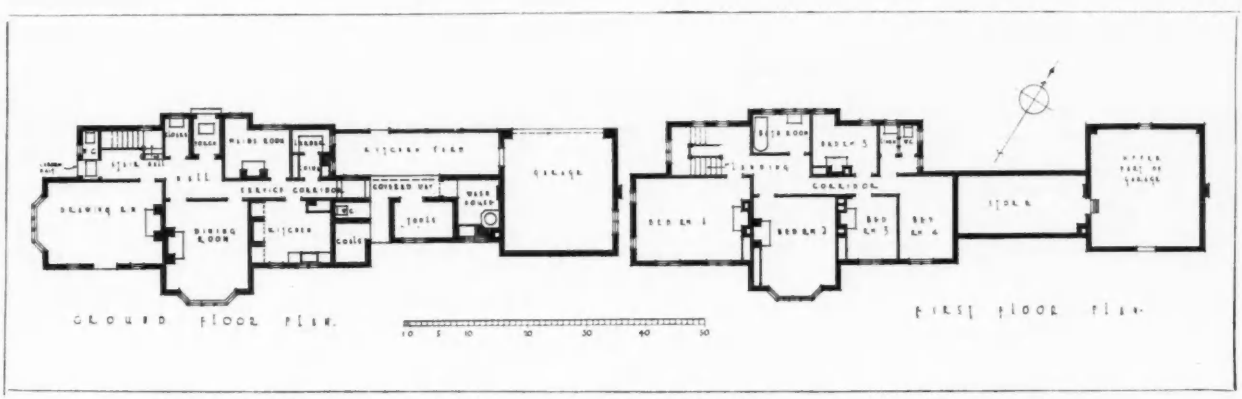
The SHEFFIELD city architect has prepared a lay-out for the erection of houses on the Shiregreen estate.

The SHEFFIELD Corporation has obtained a grant for the construction of the Burbage reservoir at an estimated cost of £650,000.

The SHEFFIELD Corporation has obtained sanction to borrow £26,277 for the erection of houses on the Wisewood estate.

The SHEFFIELD Corporation Estates Committee has adopted revised schemes for the reconstruction of two unhealthy areas in the vicinity of Bailey Street and Spring Street.

The SHEFFIELD Corporation has given authority to proceed with the erection of thirty houses on the Greenhill estate, at an estimated cost of £11,370.



The Garth, Thurcaston, near Leicester. Designed by E. J. Williams. Ground and first floor plans.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I s. d.	II s. d.
A1	ABERDARE	S. Wales & M.	1 7	1 2½
A1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A2	Atherstone	Mid. Counties	1 6	1 1½
B2	Aylesbury ..	S. Counties	1 4	1 0
B2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A2	Bewdley ..	Mid. Counties	1 6½	1 2
B2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B2	Bridgwater	S.W. Counties	1 4½	1 0½
A1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B2	Brixham ..	S.W. Counties	1 4	1 0
A2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A1	Buxton ..	N.W. Counties	1 7	1 2½
A2	CAMBRIDGE	E. Counties	1 6	1 1½
B2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B1	Chatham ..	S. Counties	1 5	1 0½
B1	Chelmsford	E. Counties	1 5	1 0½
A2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A2	Colwyn Bay	N.W. Counties	1 6	1 1½
A1	Consett ..	N.E. Coast	1 7	1 2½
A2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A2	Crewe ..	N.W. Counties	1 6	1 1½
A1	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B2	Deal ..	S. Counties	1 4½	1 0½
A2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A1	Durham ..	N.E. Coast	1 7	1 2½
B1	EAST-BOURNE	S. Counties	1 5½	1 1½
A1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 7	1 2½
A2	Exeter ..	S.W. Counties	*1 6½	1 2
B1	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B1	Gillingham	S. Counties	1 5	1 0½
A2	Gloucester	S.W. Counties	1 6	1 1½
A2	Goole ..	Yorkshire	1 6½	1 2
A2	Gosport ..	S. Counties	1 6	1 1½
A2	Grantham	Mid. Counties	1 6	1 1½
A1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B1	Harwich ..	E. Counties	1 5	1 0½
B2	Hastings ..	S. Counties	1 4½	1 0½
A2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B1	Hertford ..	E. Counties	1 5	1 0½
A1	Heysham ..	N.W. Counties	1 7	1 2½
A1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B1	Kendal ..	N.W. Counties	1 5	1 0½
B1	Keswick ..	N.W. Counties	1 5	1 0½
A2	Kettering ..	Mid. Counties	1 6	1 1½
A2	Kidderminster	Mid. Counties	1 6½	1 2
B2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B2	Lewes ..	S. Counties	1 4	1 0
A2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B1	Maidstone	S. Counties	1 5	1 0½
A2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B2	Margate ..	S. Counties	1 4½	1 0½
A2	Matlock ..	Mid. Counties	1 6	1 1½
A1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A2	Middlewich	N.W. Counties	1 6	1 1½
B	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A1	Pontypridd	S. Wales & M.	1 7	1 2½
A	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A2	Retford ..	Mid. Counties	1 6	1 1½
A1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A1	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B1	Rochester ..	S. Counties	1 5	1 0½
A1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B2	Salisbury ..	S.W. Counties	1 4	1 0
A1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A2	Shrewsbury	Mid. Counties	1 6	1 1½
A2	Skipton ..	Yorkshire	1 6½	1 2
A2	Slough ..	S. Counties	1 6	1 1½
A2	Solihull ..	Mid. Counties	1 6½	1 2
A2	South'pton	S. Counties	1 6	1 1½
A2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A1	TAMWORTH	N.W. Counties	1 7	1 2½
B1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teesside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A2	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A2	Warwick ..	Mid. Counties	1 6½	1 2
A2	Welling-borough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B2	Winchester	S. Counties	1 4½	1 0½
A2	Windsor ..	S. Counties	1 6	1 1½
A	Wolver-hampton	Mid. Counties	1 7½	1 2½
A2	Worcester	Mid. Counties	1 6	1 1½
A2	Worksop ..	Yorkshire	1 6	1 1½
A1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B1	YARMOUTH	E. Counties	1 5	1 0½
B2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, *1s. 4d. per hour;* LABOURER, *1s. 4d. per hour;* NAVVY, *1s. 4d. per hour;* TIMBERMAN, *1s. 5½d. per hour;* SCAFFOLDER, *1s. 5d. per hour;* WATCHMAN, *7s. 6d. per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
If left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, *1s. 4d. per hour;* TIMBERMAN, *1s. 5½d. per hour;* BRICKLAYER, *1s. 9d. per hour;* PLUMBER, *1s. 9d. per hour;* WATCHMAN, *7s. 6d. per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3
Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, *1s. 9d. per hour;* LABOURER, *1s. 4d. per hour;* SCAFFOLDER, *1s. 5d. per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	9	6
Staffordshire blue, per M.	5	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra.	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, *1s. 9d. per hour;* DO. *fixer, 1s. 10d. per hour;* LABOURER, *1s. 4d.* per hour; SCAFFOLDER, *1s. 5d. per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator." etc., above.			

HOISTING and setting stone, per ft. cube £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, *1s. 9d. per hour;* TILER, *1s. 9d. per hour;* SCAFFOLDER, *1s. 5d. per hour;* LABOURER, *1s. 4d. per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6 7 0	6 7 0
Grey-green do.	5 9 0	5 9 0
Green peggies, 12 in. to 8 in. long	4 13 6	4 13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0
See "Sundries" for Asbestos Tiling.			

CARPENTER AND JOINER

CARPENTER, *1s. 9d. per hour;* JOINER, *1s. 9d. per hour;* LABOURER, *1s. 4d. per hour.*

Timber, average prices at Docks, London Standard Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0		6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
DO. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO.. in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. 4 *in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. 3 *in., per yd.*	0	1	8
DO. 4 *in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. 4 *in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup., per ft.	0	1	2
DO. 4 *ft. sup.* "	0	2	3
DO. 6 *ft. sup.* "	0	2	6
DO. 20 *ft. sup.* "	0	3	1
DO. 45 *ft. sup.* "	0	3	3
DO. 65 *ft. sup.* "	0	3	5
DO. 100 *ft. sup.* "	0	3	10
Rough plate, ¼ in., per ft.	0	0	6½
DO. ½ *in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet 21 oz.	0	0	11
DO. 26 OZ.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	1½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, ⅛ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	1/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	3	5	4	3	7½	6	4½	9½	7	6
Alder	5½	3	3	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 9	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, DECEMBER 18

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Students' Pantomime. Matinee at 2.45 p.m. Evening performance, 8 p.m. (also December 19 and 20). Exhibition of photographs of buildings visited on the A.A. Excursion to Germany. Until December 21. **2.45 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Architectural Rendering." By E. M. K. Ellerton, A.R.I.B.A.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture (1)." By L. O. Faraker. "Indian Section: Cave Paintings." By T. F. Wilson, F.R.S.A.I. Both lectures at 3 p.m. **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Sheffield Sub-Centre. At the Royal Victoria Hotel, Sheffield. "Public Street Lighting, etc." By J. F. Colquhoun. **7.30 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Students' Meeting. Vernon-Harcourt Lecture on "The Work of the Institution Committee on the Deterioration of Structures exposed to Sea-action." By Prof. S. M. Dixon, M.A., B.A.I., M.INST.C.E. **6.30 p.m.**

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C. Conclusion of series of lectures on Greek Architecture by Sir Banister Fletcher, dealing with Theatres, Tombs, Town-planning and Propylæa. **6 p.m.**

CITY ART GALLERY, Manchester. Exhibition of photographs of modern commercial architecture. Until December 31.

INSTITUTION OF SANITARY ENGINEERS, 120 Victoria Street, S.W.1. "The Channel Tunnel." By H. N. Carnvalho. **7 p.m.**

THURSDAY, DECEMBER 19

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. **4.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. "The Heating of Buildings Electrically," by Lt.-Col. S. E. Monkhouse, R.E., and L. C. Grant; and "The Heat Pump—An Economical Method of Producing Low-Grade Heat from Electricity," by T. G. N. Haldane, M.A. Light refreshments at 5.30 p.m. **6 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Hampshire Sub-Centre. At the Municipal College, Portsmouth. "Naval Wireless Telegraphy Communications." By G. Shearing, B.SC., and Captain J. W. S. Dorling, R.N. **7.30 p.m.**

BRITISH MUSEUM, Bloomsbury, W.C. 1. "Origins of Architecture. II. (Romans, etc.)." 12 noon. "Monuments of Egypt. III." 3 p.m. Both lectures by Cecil Hallet, B.A., F.S.A. "Greek Sculpture. III. (Mausoleum, etc.)." 3 p.m. By W. W. Skeat, M.A. 3 p.m. **12 noon**

FRIDAY, DECEMBER 20

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee. **4.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Architecture (2)." By L. O. Faraker. "Chippendale." By T. F. Wilson, F.R.S.A.I. Both lectures at 12 noon. **12 noon**

THE LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Lecture on *The Times* by John Walter, to be held in the Hall of the Royal Society of Arts, 18 John Street, Adelphi, W.C.2. **5 p.m.**

SATURDAY, DECEMBER 21

Sunrise, 8.6 a.m. Sunset, 3.50 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Mogul Design." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

TUESDAY, DECEMBER 24

TOWER OF LONDON, E.C. 4. "The Tower in Stuart Times and After." By Allen S. Walker. (Lantern illustrations.) **11 a.m.**

WEDNESDAY, DECEMBER 25 (CHRISTMAS DAY)

R.I.B.A., 9 Conduit Street, W.1. The Office and Library will be closed until Saturday, December 28.

THURSDAY, DECEMBER 26 (BOXING DAY)

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. 12 noon. General Tour. By T. F. Wilson, F.R.S.A.I. 3 p.m. "English Furniture." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon**

FRIDAY, DECEMBER 27

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Chinese Porcelain. I." By L. O. Faraker. **12 noon**

SATURDAY, DECEMBER 28

Sunrise, 8.8 a.m. Sunset, 3.55 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Mogul Paintings." By T. F. Wilson, F.R.S.A.I. 3 p.m. "Chinese Porcelain. II." By L. O. Faraker. 12 noon. "Chinese Porcelain. III." By L. O. Faraker. **3 p.m.**

MONDAY, DECEMBER 30

R.I.B.A., 9 Conduit Street, W.1. First of three Christmas holiday lectures on Architecture for boys and girls. "English Architecture—How it Began." By the Hon. Humphrey Pakington, A.R.I.B.A. **3.30 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi. Dr. Mann's Juvenile Lecture. Admission by Special Ticket.

TUESDAY, DECEMBER 31

DAILY MAIL SCHOOL BOYS' EXHIBITION, Horticultural Halls, Westminster, S.W. To be opened by the Hon. Esmond Harmsworth at 10.30 a.m. The various exhibits will include working models of electric trains, motors and engines, as well as examples of work in various arts and crafts such as woodwork, pottery and metal work. Work in the engineering, building, printing, and other important trades will also be shown. **10.30 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." 12 noon. "English Mediæval Sculpture," 3 p.m. Both lectures by T. F. Wilson, F.R.S.A.I. **12 noon**

WEDNESDAY, JANUARY 1, 1930

R.I.B.A., 9 Conduit Street, W.1. Second of three Christmas holiday lectures for boys and girls. "English Architecture—How it Grew." By the Hon. Humphrey Pakington, A.R.I.B.A. **3.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Metalwork." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, JANUARY 2

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

FRIDAY, JANUARY 3

R.I.B.A., 9 Conduit Street, W.1. Last of three Christmas holiday lectures for boys and girls. "English Architecture—What it Means." By the Hon. Humphrey Pakington, A.R.I.B.A. **3.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Far Eastern Pottery." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

SATURDAY, JANUARY 4

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

MONDAY, JANUARY 6

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Modern Design and Decoration." By Howard Robertson, F.R.I.B.A., S.A.D.G. (Lantern Illustrations.) **7 p.m.**

WEDNESDAY, JANUARY 8

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Regional Planning with special reference to Greater London." By Dr. Raymond Unwin, F.R.I.B.A. Award of Prizes and Studentships. **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Regional Planning in S.W. Lancashire." By T. Pierson Frank, M.INST.C.E., F.S.I. **8 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1. "Observations on Flue Equipment, &c." By C. A. Masterman, B.A., A.I.C., M.S.C.I., M.S.I.E. **7 p.m.**

THURSDAY, JANUARY 9

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "The Work of the Building Research Station." By Dr. R. E. Stradling, D.SC., PH.D. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C. 2. Ordinary Meeting. **6 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Dundee Sub-Centre. At the University College, Dundee. "Lubrication." By G. H. Chalmers. **7.30 p.m.**

MONDAY, JANUARY 13

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Western Centre. Annual Dinner (at Cardiff).

THURSDAY, JANUARY 16

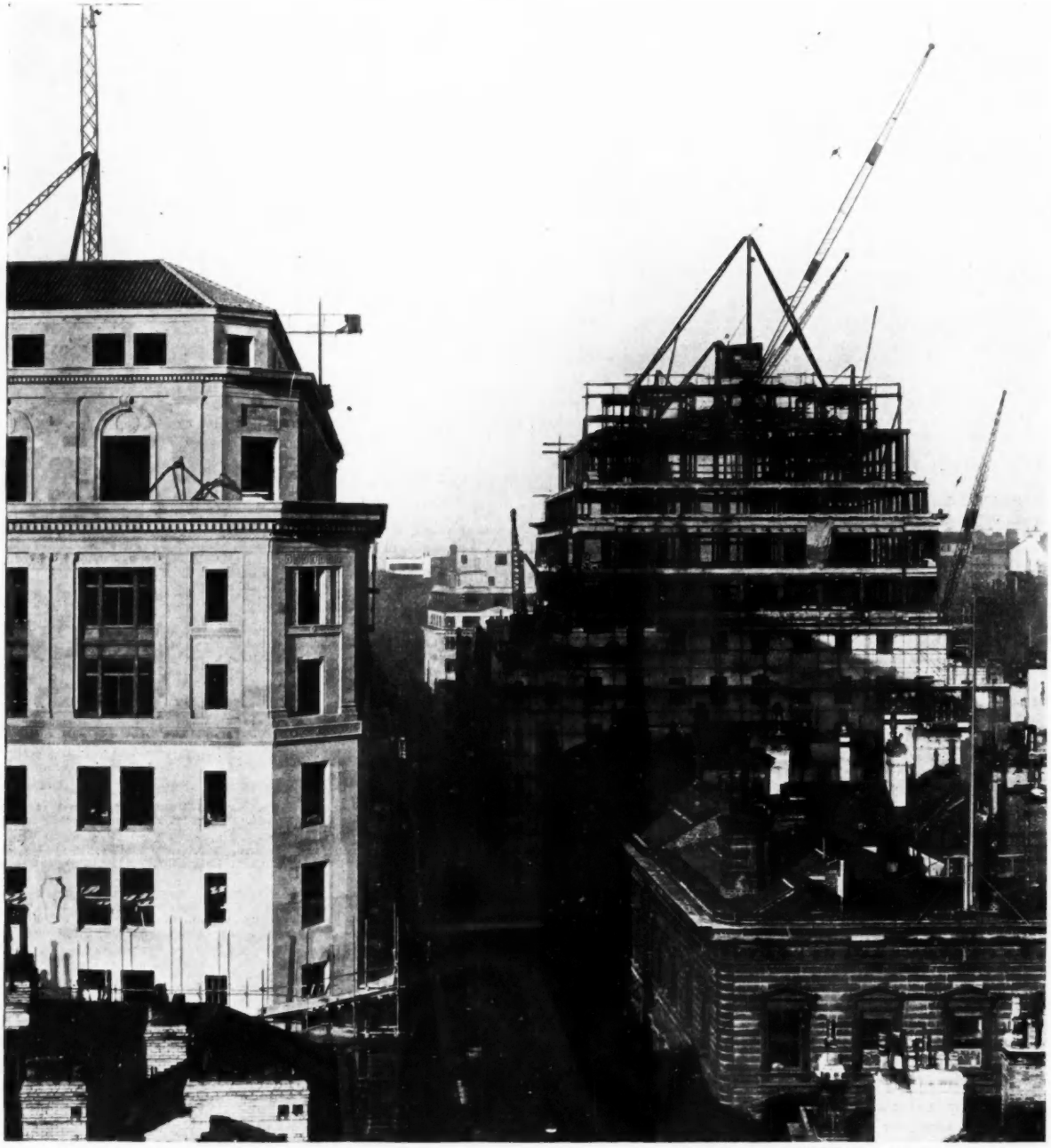
INSTITUTION OF ELECTRICAL ENGINEERS Hampshire Sub-Centre. At University College, Southampton. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. **7.30 p.m.**

FRIDAY, JANUARY 17

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Smoking Concert to be held at Carr's Restaurant, 264 Strand, W.C. Tickets may be obtained from the Secretary.

TUESDAY, JANUARY 21

INSTITUTION OF ELECTRICAL ENGINEERS. East Midland Sub-Centre. At the College, Loughborough. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched-Arc Switch." **6.45 p.m.**



[*Specially photographed for* THE ARCHITECTS' JOURNAL

LIVERPOOL'S NEW SHIPPING AND BANKING HEADQUARTERS

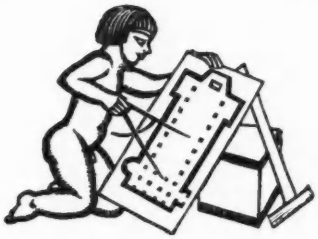
In this unusual photograph, taken from the roof of the National Bank, Liverpool, two of the most ambitious among recent architectural developments in this country are combined in one view.

On the left will be seen the second and larger portion of India House, the headquarters of the Holt Steamship Company, Ltd., nearing completion. The first part, comprising roughly a third of the whole edifice, was finished a couple of years ago.

In the middle distance on the right stands the skeleton of the new headquarters of the Bank of Liverpool and Martins. This building, when finished, will contain one of the most spacious banking halls in this country. Although the steel skeleton still remains largely unclothed, the giant marble columns in the banking hall are already in position, for these columns, being monolithic, had to be threaded on the steel stanchions before these were framed up.

An interesting feature of both these buildings is the recessed top story, so seldom seen in London owing to the prevailing unhappy interpretation of the London Building Act. The architects for India House are Arnold Thornely and Herbert J. Rowse, but Mr. H. J. Rowse alone is responsible for the bank.

THE ARCHITECTS' JOURNAL



WEDNESDAY, DECEMBER 18, 1929

A COMPETITION, AN OPEN COMPETITION FOR CHARING CROSS BRIDGE!

Ministers of the Government are suspected of the intention to push forward at speed the sharply-contested official Charing Cross Bridge proposal, turning a blind eye to its æsthetic and even, in a long view, to its financial, aspects. Why? The apprehension that to do so will immediately and materially ease unemployment is demonstrably fallacious. A unique opportunity arrives for planning this central feature of the Metropolis in conjunction with the development of the Surrey side. An open competition is the only resort.

IN the world of architecture it has been found by experience that the best method of securing that commissions for important architectural works shall be given to men of superior talent is by public competition. It will be understood, however, that this system depends for its success as much upon the ability of the assessors as it does upon that of the competitors. How is it possible to determine the conditions of a great architectural competition to settle the question of Charing Cross Bridge?

In the last issue of this JOURNAL a contributor suggested that the assessors should include among their number a town planner, an architect and an engineer, and that in tackling the Charing Cross problem they need not start *de novo*, but could incorporate into the programme of the competition certain features which represent the greatest common measure of agreement which can be arrived at between the principal disputants, who in the last few weeks have been responsible for official and unofficial proposals for Charing Cross Bridge. It may be assumed, for instance, that the Southern Railway Station should be moved to the other side of the river, that a new bridge or bridges should be constructed to relieve the congestion of cross-river traffic, and that on the south side an embankment must be formed such as might make possible an architectural treatment comparable to that of Somerset House.

A bold vision is here required, and it is worse than useless to adopt the makeshifts which have found favour with the technical advisers of the London County Council and the Southern Railway. The absurd complexities of the road layout on the Surrey side of the river as shown in the official scheme should not for one moment be regarded as representing a type of civic design worthy to be exemplified in the Metropolis.

Nobody can have watched the operation of the competition system without realizing the high standard of assessorship shown, and the excellent results that have accrued from it. The quality of architecture and of layout which today especially appeals to the trained assessor is that of *elegant simplicity*, in which the practical and æsthetic requirements are simultaneously fulfilled. It remains then for Parliament to throw out the Bill presented to it by the London County Council, and to insist upon the holding of a great competition, which would do more for the good planning of London and the beautification of its architecture than any other enactment conceivable at the present time.

This competition would naturally need to be divided into several parts. The first must be of an all-embracing character and would determine the general layout of the site; the second would deal with the problem of riverside architecture as a whole, and would decide the main outlines of the buildings abutting upon the embankments; while the third would be concerned with the designs of the Charing Cross Bridge itself, and of the new terminal station.

There are serious grounds for believing that the reason why the official scheme is being pressed forward with the utmost dispatch is because it is regarded by the Government as offering a prospect of the early relief of unemployment. On the other hand, the number of men who could be engaged upon these works is but a very tiny fraction of the total figure of the unemployed; thus, such an excuse for precipitate action should not carry much weight with the Government, whose proper aim is to establish the public welfare as a whole, rather than to concentrate upon one aspect of the social problem, and ignore other considerations which are highly important. Nevertheless, it is incumbent upon critics of the official Charing Cross scheme to show how their proposals might assume definite form with the minimum of delay.

NEWS & TOPICS

OFFICIAL ARCHITECTURE

THE *Manchester Guardian* has done good service to architecture in opening its columns to a lively debate upon the present tendency of H.M. Office of Works to carry out departmentally the designs of important public buildings. It may be remembered that the same question was discussed a few months ago at the Architecture Club, and on that occasion there was revealed a good deal of professional resentment at the encroaching policy of officialdom. It appears, however, that this criticism has not fallen upon deaf ears, and I was glad to read the statement of Sir Lionel Earle, Permanent Secretary to the Office of Works, to the effect that, contrary to the common impression, his department was not yet committed to the task of itself preparing the designs of the proposed large block of offices in Whitehall which will stand between Gwydyr House and Richmond Terrace. He says that the question of the design of the new building is not now under consideration, for it may be some years before the site can be developed, and he considers it likely that an outside architect will eventually be called in. The competition which was won by Mr. Vincent Harris was for a comparatively small building; since then the Government has acquired the Duke of Buccleuch's house, which is built on Crown property, and that provides a very much larger territory than it had before. Sir Lionel Earle, however, does not rule out the possibility that the commission for the new building will be given to Mr. Vincent Harris.

BETTER LATE . . .

It has for long been a source of wonder that the Government, in providing a large part of the expense of road construction, should not have exercised their control to safeguard the amenities, and thereby the future value, of national roads. In a circular issued to departmental road engineers the Minister stresses the need for safeguarding existing amenities and for providing new ones. "It would be unwise," he says, "to interfere with fences and to destroy existing amenities for the sake of a comparatively small gain in width. . . . Verges, as well as the slopes of cuttings and embankments, should be soiled and seeded . . . turfed or planted with shrubs. Trees should not be felled unless absolutely unavoidable. . . . New planting should be encouraged. . . . The widening of bridges should be carried out as part and parcel of road work. The choice of pleasing materials for the parapets of bridges is a matter of much importance . . . as being the part of the structure seen by all road users."

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This is encouraging, and a step in the right direction. But what of the buildings that line these fine roads? Is the Ministry to continue its policy of encouraging ribbon development? Is there to be any control of the uses of the frontage that may help to eradicate the bad petrol station and the mean residential development? And may we not still hope that the wisest of all policies—that of controlling a greater depth of frontage and the creation of real parkways—will be inaugurated to preserve, as nothing else can, the best amenities, not only of the roads themselves, but of the entire country through which they pass?



The Pont Lucien Saint, a concrete "bowstring" bridge constructed in French Tunisia.

THE ABBEY SACRISTY REPORT

The announcement of the Dean of Westminster that the committee of assessors he appointed to advise him regarding his proposal to add to the north wall of the Abbey a modern sacristy has unanimously decided against such a scheme, will be read with particular satisfaction by those who approve the stand taken by this JOURNAL in the matter. It appears that a new scheme, which has not been previously suggested, is now recommended for acceptance. Thus once more the truth is established that public criticism of architectural schemes does on occasion take effect, and in this particular instance all parties concerned in the dispute have reason to be satisfied. For it must surely be pleasing to Dr. Foxley Norris that the Abbey Sacristy is a matter of such general concern that people are willing to argue heatedly about it, while those who opposed the original scheme applaud the Dean's decision to take into his counsel a board of assessors and to abide by their verdict. It is probable that, as its immediate object is achieved, the Council for the Protection of Westminster Abbey will be dissolved, though it may organize itself into a new Society, the object of which will be to study the Abbey and promote an interest in its preservation.

THE C.P.R.E. SURVEY OF THE UPPER THAMES

We may all congratulate the C.P.R.E. upon the great service which they have rendered the public at large and all those who love the Thames in particular, in preparing the survey of the Thames Valley from Cricklade to Staines. The survey undertaken by the Thames Valley Branch of the C.P.R.E. and prepared by Lord Mayo and Professors S. D. Adshead and Patrick Abercrombie, assisted by Mr. Harding Thompson, is the first concerted effort to lay bare the disease which threatens so many of our best amenities. The book is divided roughly into two parts: the detailed description of the river and its banks—the good of it, and the bad, and the worst; and a body of recommendations for the proper safeguarding of its beauties, the eradication of its black spots, and the creation of new beauty.

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Though there is no lack of definite recommendations, the book may be regarded as part of the C.P.R.E.'s noble



Looking along the "string" of the bridge's "bow." The design won a competition.

work of educating public taste to the appreciation of what may be lost by ignorance and apathy. It is a sober, unemotional warning arising out of a catalogue of the facts as they appear, heightened and clarified by beautifully drawn maps, by photographs of the best and the worst, and by one or two illustrations of the finest aspects of the river, reproduced in colour from old views by Turner and Farington.

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There can be nothing but praise for the thoroughness with which the authors have tackled a job bristling with difficulties. When the similar survey which Messrs. Adams, Thompson and Fry are undertaking for the County Councils of Surrey and Middlesex, for that part of the river stretching from Staines downward to Putney, is presented, and later published, some concerted scheme of action may well be put in hand to make safe the river for the next hundred years.

IN TIME OF FLOOD

Meantime, the recent serious floods in the Thames Valley lend an added importance to the schemes of drainage and river widening and deepening proposed by the Surrey County Council and the Thames Conservators. It is feared by many that the Wey Valley Drainage Scheme will bring a greater volume of water into the main stream than it can carry in times of flood, and no doubt these people would like to see both schemes carried out either simultaneously or not at all; while those who guard the Thames amenities are fearful of the damage to the essential character of the banks which either may cause. The poor L.C.C., who must cope with whatever comes down stream to them, are mindful of past accidents and oppose all changes from the *status quo*. It is odd to see how little the mechanical ingenuity of modern man has done to keep within bounds the waters of such a placid stream as the Thames. We may tame the unruly Nile, and harness Niagara, yet here in our own country little streams rise and overwhelm us yearly, as they did when Romans threw light bridges across them, and before London Bridge was built.

WHERE POST-IMPRESSIONISM FAILS

It is curious that quantity surveying is not generally regarded as one of the learned professions; for it demands a training as severe as most of them. Mr. J. E. Drower, speaking at the first annual dinner of the Chartered Quantity Surveyors, held in London on Wednesday last, pointed out that some of the buildings for which quantities have to be taken off fill the surveyor with the sort of bewilderment many people experience in contemplating the paintings of Gauguin and Cezanne, or the sculpture of Epstein. But no matter how post-impressionist or cubist or vorticist the buildings may be, the quantity surveyor has to translate them into something clear-cut and definite, so much material dealt with by so much labour in terms to which a price may be applied. Post-impressionism cannot be applied to a bill of quantities; mathematics and geometry do not lend themselves to it.

THE A.A. PANTOMIME

The A.A. Students' Pantomime is to me one of the really good things of the architectural year. For weeks before it is due I find myself looking forward to it with an eagerness—an excitement, even—which the R.I.B.A. elections themselves do not call out in me; and when, eventually, rumours and hints of its contents begin to percolate through the atmosphere of secrecy, I am aware of that pleasing moistening of the tongue which Fortnum and Mason's catalogues always provoke.

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The present "show" follows on the lines laid down by its immediate predecessor—each of the four senior "years" presents its own act. Now, I am the first person to appreciate the motives for, and convenience of, such a scheme. I approve the variety of technique and effects which are introduced by this means. But I do not think that the arrangement calls forth the best possible "book"—and that, after all, is the basis of the "show." However, in case it be thought that I did not thoroughly enjoy the show, let me say now that the dresses, settings, and acting are remarkably good. Full use has been made of that remarkable material "American cloth" (Why *American*, by the way?), with the result that the colour effects surpass in brilliance anything that the A.A. has yet done. And there is a gentleman (to quote Sam. Pepys) "in some measure overserved with liquor": the man who plays this part is a worthy rival to Hugh Wakefield!

A "BOWSTRING" BRIDGE IN CONCRETE

The elegant and daring bridge illustrated, which is known as the Pont Lucien Saint in honour of the French Resident-General in Tunisia who inaugurated it (bridges never seem to be called after the man who designed them), was opened in June 1927, and has proved a complete success. It spans the "Waddy" Mellègue, a watercourse—which, though often dried up, is subject to sudden spates—encountered on the main road from Tunis to Souk-Ahras. It is the result of a competition, and was designed by Monsieur Henry Lossier, the consulting engineer of *Les Etablissements Fourré et Rhodes*, being considered to be the only one which would solve the engineering problems involved, one of which was that there should be no intermediate pier.

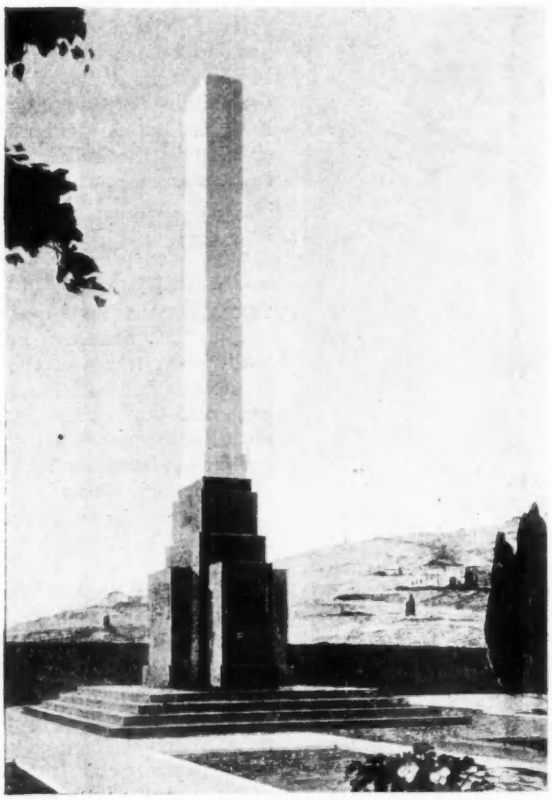
★

The span is ninety-two metres between axes, the parabola is 15·30 metres high. Each of the four bowstrings is reinforced with an armature of ninety steel rods, while an N-shaped network of interlacing ligatures unites the twin arcs of each of the two separate bowstrings, which are also cross-braced overhead. The construction was carried out with shuttering of local eucalyptus wood largely by native labour. The bowstring type of concrete road bridge is becoming increasingly familiar on the *routes nationales* of France, and now a standard design. ASTRAGAL

THE MUSSOLINI MONOLITH

Quarrying and Transporting 400 tons of Carrara Marble

BY VIATOR



A perspective drawing of the Monolith, as it will appear when erected in position in the Mussolini Forum, in the gardens of the Farnesina Villa at Rome. The white marble obelisk is the gift of the marble merchants of Carrara. The architect is Giuseppe Boni.

THE Mussolini Monolith consists of a block of white marble presented by the marble merchants of Carrara—a gift to be set up in the city of Rome in the gardens of the historic Farnesina Villa at the foot of the Janiculum, which is to be the centre of the life of Young Italy for generations to come, where athletics and physical culture are to be taught and the training of the body is to be pursued under skilled direction in the most favourable conditions.

It is also a tribute to "il Duce," as a monument for all time to the new regime, which, while trampling out every vestige of civil liberty, for which it openly expresses the utmost contempt, has yet undoubtedly brought material prosperity, whether permanent or not, to the great mass of the Italian people.

HOW THE PROJECT WAS CONCEIVED

About two years ago, soon after the founding of the Consorzio, which now governs the Carrara marble trade, the proposal was brought forward by the Hon. Renato Ricci, President of the Consorzio and Member of Parliament for the province of Massa Carrara, that such a tribute should be presented by Carrara.

In view of the position held by the proposer—practically that of dictator to the city and trade of Carrara—its acceptance was a foregone conclusion. The great enterprise is now all but completed, despite some delay while the block lay in the Tiber, moored to St. Paul's quay, awaiting the autumn rains to raise the level of the river some three or four feet so as to allow the raft bearing it to be towed higher up the river, to the immediate neighbourhood of the Farnesina Gardens.

The Mussolini Monolith measures about fifty-seven feet by eight or nine feet, and weighs 400 tons. It was sawn with the helicoidal wire out of the living rock of the Carbonera quarry, one of the highest quarries of the Fantiscritti valley, which itself is among the most important and prolific of the marble valleys running up into the Apuan Alps from the town of Carrara.

The quarry in question is one of those whence the ancient Romans quarried marble more than 2,000 years ago, soon after their conquest of Luni and its surroundings in the year 180 B.C. It was from the town of Luni, now only marked by a few scattered ruins, that Carrara marble derived its classic name "marmor lunense."

It was a daring project to cut a block of 400 tons out of the mountain, a block which must be absolutely free from every defect or flaw, a block which it is claimed is the largest piece of marble the world has ever seen.

In the days of long ago, when unlimited numbers of slaves were available, such an enterprise might have been possible, but in that case years would have been needed for the work. Even forty years ago the task would have been impossible, but today, thanks to modern methods of quarrying, the endless helicoidal wire and the penetrating pulley, the work was not only possible but it was actually carried through in the course of a few months.

THE PROBLEM OF TRANSPORT

But when the block was cut out and lay in the quarry, only a fraction of the difficulties of the enterprise had been overcome. There it lay, an inert mass, 2,624 feet above sea-level and eight miles from the sea. How to get it to Rome?

In order to protect it from damage during the journey, an immense crate of pitch-pine timber was built around it. The base consisted of baulks of 14-in. by 12-in. timbers, and the whole was bolted and riveted together with ten tons of bolts and angle irons.

The method of transport adopted, indeed the only one



The column, after cutting out of the rock, lying in the Carbonera quarry, and awaiting transportation. This view, towards Carrara and the sea, is eloquent of the difficulties of transit.



Inside the crate of pitch-pine timber, prepared to protect the column, which is about 57 ft. long and 8 or 9 ft. thick, and weighs some 400 tons, during its passage to the sea.



The column crated and leaving the quarry. Three longitudinal runners were placed under it, and the mass eased down under gravity, over transverse timber sleepers, liberally soaped. Twenty steel wire cables were employed to hold it in check.



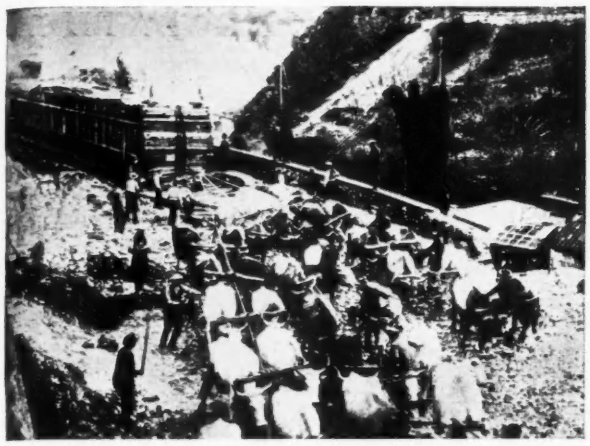
The descent of the crated column through the mountainous surroundings of the Carbonera quarries. The method is the traditional one in use for the transportation of Carrara marble since the days of Roman slave-labour.

possible, was the old-fashioned sliding way or "lizza" by which three-fourths of the marble produced in Carrara today is brought down from the quarries, just as the marble was transported by the Roman slaves, progenitors of the present-day marble workers.

The crate or block is placed upon longitudinal runners. Usually there are two of these, but in the case of the Monolith there were three, and each was sixty-five feet long. Under these are put transverse sleepers, plentifully lubricated with soap, and on them, propelled by the force



A near view of the slipway of soaped timbers over which the crated block travelled. To make way for so unprecedented a mass the road had to be widened, bridges strengthened, and even houses and a railway bridge demolished.



Transport by road. The crate being drawn along Strada Carriona in the Carrara hills by fifty yoke of oxen.

of gravity, the block slides forward, being held in check by powerful ropes. A series of posts is solidly fixed in the rock along the side of the track, and around these the ropes are twisted and slowly paid out to allow the block to progress. In the case of the Monolith there were twenty of these ropes. They were made of steel wire, and each consisted of 180 strands and together totalled a length of 32,810 feet, and weighed about thirty-five tons.

PREPARING THE TRACK

Among all the difficulties of the enterprise, not the least was the preparation of the road or track, which in many places has a slope of forty-five degrees. The existing roadway was altogether inadequate for the passage of such a mass. In some places the mountain-side had to be blasted away, roads had to be widened, bridges strengthened, houses or parts of houses and one railway bridge to be demolished. The work of preparing the first 1,000 feet of the track alone occupied 10,000 man-days. When the block reached the lower levels it was drawn through the city and down to the Marina by fifty yoke of oxen. The first goal was reached when the block arrived at the seashore, at the Marina of Carrara.

The problem of getting the Monolith to Rome by sea involved questions of quite a different character, and these were taken up by the technical staff of the Royal Naval Arsenal and Dockyard of neighbouring Spezia. As a result of their deliberations a special kind of pontoon was built, a craft mainly consisting of a series of tanks, bolted together in the form of a barge, and on this the Monolith was loaded.

THE VOYAGE BY SEA AND RIVER

It left the Marina in charge of tugs about ten o'clock on Sunday morning, June 23, last, after a religious ceremony, conducted by the Bishop of Massa, and a number of congratulatory speeches by Renato Ricci and other local notabilities. Forty-two hours later, after an entirely uneventful voyage, it safely reached the mouth of the Tiber.

The Monolith is to be erected on a base of Dove marble about forty-three feet high, and when completed the whole monument will measure about one hundred feet in height.

On one side of the Forum will be the Fascist Academy of Physical Culture, and the buildings, which were inaugurated by Signor Mussolini on February 5, 1928, will comprise six large dormitories, twenty-four class-rooms, a library, a museum, a great hall, with 5,300 feet of floor space, and the usual offices, all planned on the most up-to-date principles. Wide open spaces around the buildings ensure abundant light and air, and some of Italy's most famous sculptors are commissioned to create fourteen statues of marble of heroic size to adorn the exterior.

Adjoining the Academy a marble stadium is being constructed to accommodate 20,000 persons. The marble required for this work will amount to nearly 90,000 cubic feet or about 7,500 tons, and other provision for games will by no means be lacking. It is in the midst of this Forum that the Mussolini Monolith is to be erected to designs prepared by the architect, Giuseppe Boni. For months past, the stupendous undertaking has been the absorbing topic of conversation in Carrara.

SOME DETAILS OF A GRANDIOSE SCHEME

It may be of interest to give some details of the scheme as a whole. In the Forum there will be a second and larger stadium, with room for no less than 100,000 spectators. It is intended to establish, in addition, football fields for both the Association and Rugby games, running tracks, tennis courts, an open-air theatre, and two swimming tanks, together with other separate halls for fencing, boxing, wrestling, etc. Two gymnasia are to be erected, one covering 6,000 feet of floor-space, and the other of smaller dimensions. The project includes a race-course, with a range of stabling attached.

The space on which the various buildings are being erected has an area of about ninety acres, and when these grandiose ambitions are realized it will represent such a centre for physical training, such an endowment of the youth of the Italian nation, as no other country has ever dreamed of devoting to her rising generations.



Transport by water. The special raft built to float the column arriving in the River Tiber beneath the walls of Castel St. Angelo, Rome, in charge of a tug.

WATER PURIFICATION FOR SWIMMING BATHS

BY KENNETH M. B. CROSS

THE authors of *The Purification of the Water of Swimming Baths*,[1] Messrs. E. A. Sandford Fawcett, J. Alison Glover, and Dr. H. T. Calvert, have placed members of the architectural profession, and others interested in the erection and equipment of swimming baths, under a considerable debt of gratitude for an admirable summary of the development of water purification for swimming baths, and a statement of present-day requirements.

A short resumé of the development of bath building prior to the Baths and Washhouses Act, 1846, and the installation of the first filtration and aeration plant for covered-in baths at Bury in 1905, and incontrovertible arguments as to the need for increased swimming facilities serve as an introduction to the main theme, viz. : *a :* Pollution in swimming baths; *b :* Infection transmitted by bath water; *c :* Methods of purification.

In regard to pollution, this may be due to the water supply being affected by sewage, if it is drawn from the sea or river, or in the case of open-air baths, it may be due to contamination from surface drainage, percolation, vegetation, etc. In covered swimming baths also the growth of organisms already in the water may be developed by heating; also in cities pollution may take place as the result of dust and soot blowing through the windows. Further, a considerable amount of filth found in the water is carried from streets by the boots of the bathers.

The side paths to the pools, or what are properly known as bath platforms, are used by the bathers both for entrance to the dressing-boxes and for their subsequent entrance to the water, and it is recommended that the entrances to the dressing-boxes should be from separate external corridors.

Unfortunately, in making this recommendation, the authors appear to have overlooked two points :—

1. That supervision of each external corridor running along the sides of the swimming bath hall entails the employment of one attendant.

2. That the congested nature of the majority of sites allocated to public baths prohibits the provision of external corridors if a full-size swimming bath is to be obtained.

Accordingly, whilst I am in entire agreement with the suggested improvement from the point of view of efficient filtration, yet, on the other hand, administrative costs, building costs and site limitation, in those districts where swimming baths are most generally needed, in my experience seem to militate against it.

The suggestion that shower and foot baths be supplied, and that the bathers be compelled to use them is admirable, though it is not a new one, and of course is dependent upon effective supervision for its enforcement, and though they raise the question as to the most suitable material for the bath platform or surround, the authors do not offer any contribution to the solution of this problem.

The evidence that various diseases are occasionally, though infrequently, transmitted by the water in swimming baths must be recognised, though alarmist rumours as to their frequency may be discounted. The water in all baths should be clear, sparkling, attractive, and free from germs of disease or bacteria, and the requisite standard of purity can best be maintained by the system of continuous rapid filtration with the addition of continuous and regulated chlorination and aeration. This method of purification has advantages over the "fill and empty" system, and when the refilling of a bath pond is not done daily, the purification system is overwhelmingly superior.

One of the chief objections to the former system is the cost of emptying and filling the swimming pond, and of heating the water to the bathing temperature of approximately 72 deg. F. In most districts also the work of emptying and cleaning the pond and re-filling and heating must be carried out at night, entailing extra wages costs.

But the case in favour of some system of filtration, from the point of view of water consumption alone, is not so overwhelming as might at first appear.

Certain filtration plants require large quantities of what is termed "wash-water" for cleansing the filter beds in each filter. If, for example, the wash-water required for this purpose is 1,000 gallons per minute per filter, and if this washing process is to last for three minutes in the case of each filter, and the process is necessary in a plant of, say, three filters at least once per day, the daily consumption of water which has to be carried away by the waste drains amounts to 9,000 gallons per day.

Some makers of filtration plants do not require so large a volume of wash-water, others arrange for the re-filtration of wash-water so that waste is eliminated, and others draw the wash-water from the swimming bath itself.

Before the wash-water is forced upwards through the sand bed it has to be broken up by some means of agitation. Air under pressure may be employed for this purpose, or another method consists in rocking the filter backwards and forwards on its axis.

Briefly, the process of filtration may be described as follows : The water is drawn from the deep end of the pond by a pump, which should be in duplicate, through a strainer, and after the addition of coagulants to precipitate organic matter, is pumped to the top of the filter units. These consist of vertical or horizontal closed cylinders, containing sand and graded gravel filter beds, and, after the water has filtered through this medium, it is discharged by pipes placed at the bottom of the filter. The filter is cleansed by forcing water in a reverse direction, and the amount of water required for this purpose varies with the type of plant employed. The intervals of cleansing per day depend upon the number of bathers using the bath. After filtration, the water is brought to the requisite temperature by means of calorifiers, aerated and chlorinated, and is made to re-enter the bath preferably by a number of inlets at the shallow end. Emphasis is laid by the authors on the desirability of ensuring that the period of complete circulation or "turnover" should be short, i.e., for covered baths up to 150,000 gallons capacity, it should not be more than four hours, and the rate of filtration should not be so excessive as to allow the passage of unclarified water through the filter.

The appropriate and precise dosage of coagulant previous to filtration is necessary, and the water should always have a slight but definite degree of alkalinity, and reliable and easily regulated dosing and mixing apparatus is therefore required.

[1] *H.M. Stationery Office. Price 1s. net.*

BANKING PREMISES

Gracechurch Street, E.C.

DESIGNED BY CAMPBELL JONES, SONS, AND SMITHERS



A general view of the front—Portland stone above a granite plinth—to Gracechurch Street.

THESE new premises for the Dominion, Colonial and Overseas branch of Barclays Bank stand on the site of the old Colonial Bank, which occupied Nos. 28, 29 and 30 Gracechurch Street. The site was cleared in 1927, and preparations were made for the rebuilding. This was commenced early in 1928 and has recently been completed. The building has frontages of 74 ft. to Gracechurch Street and 37 ft. to Lombard Court. The whole structure is steel framed and encased in concrete, the elevations being faced with Portland stone above a granite plinth.

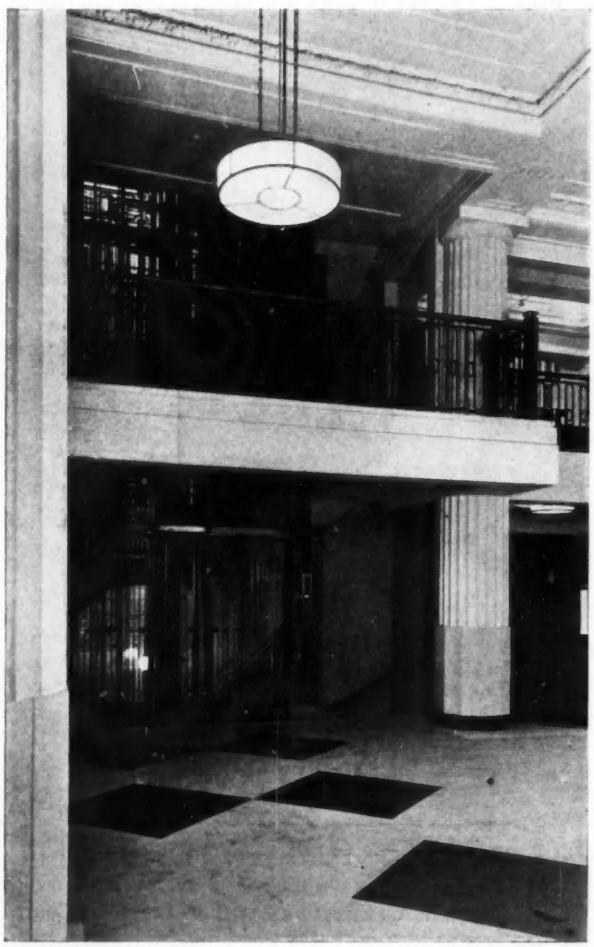
Internally, the banking hall has a high dado of mahogany, inlaid with ebony, and fibrous plaster finish to the walls over, but the main staircase, formed of reinforced concrete,

is finished in terrazzo, together with the dado. The floors of the main office are covered with battleship linoleum or cork tiling, and the public space in the banking hall has rubber and marble.

In the banking hall the grilles and balustrading are of bronze metal, and windows are of steel construction generally.

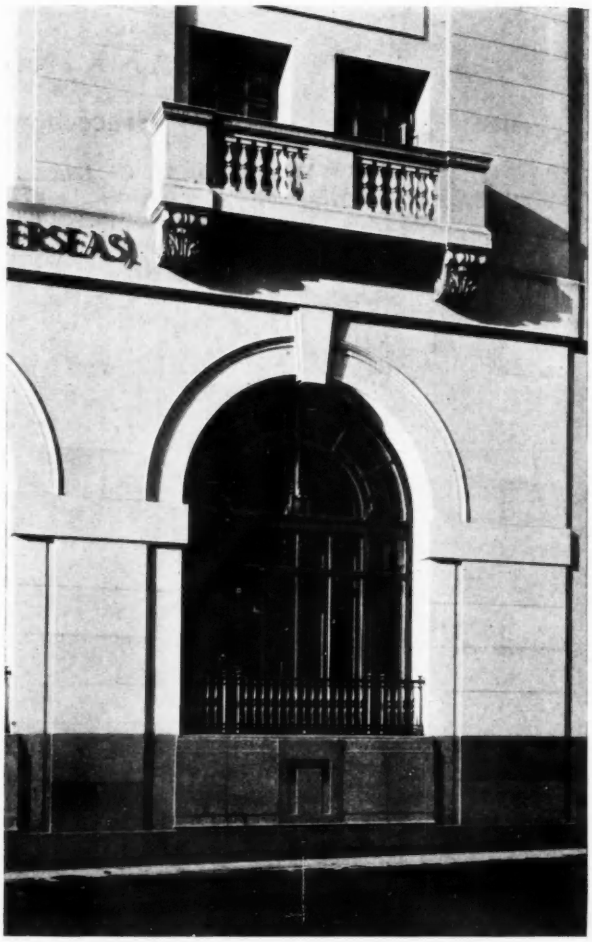
There are three high-speed lifts, two of which face the main entrance, for the use of the public, and a third, which is intended mainly for the use of the staff. The committee-room, manager's and directors' rooms are panelled with mahogany dados and have plaster panels above. The director's lunch-room is panelled in oak, adapted from the panelling which was in the old premises.

All departments and rooms are ventilated by trunks from an air washer plant which is installed in the basement, and the whole building is warmed by a system of oil-fired central heating. The ceilings generally are covered with an acoustic material, surrounded by enriched plaster cornices. In accordance with modern practice, synchronized clocks are installed in every important room throughout the building, each of which is also connected with private and public telephone systems.



Barclays Bank, D. C. & O. Branch, Gracechurch Street, E.C. [*By Campbell Jones, Sons, and Smithers.*

The lift enclosure in the public hall houses two high-speed lifts, and has stairs surrounding it, carried out in reinforced concrete and finished in terrazzo.



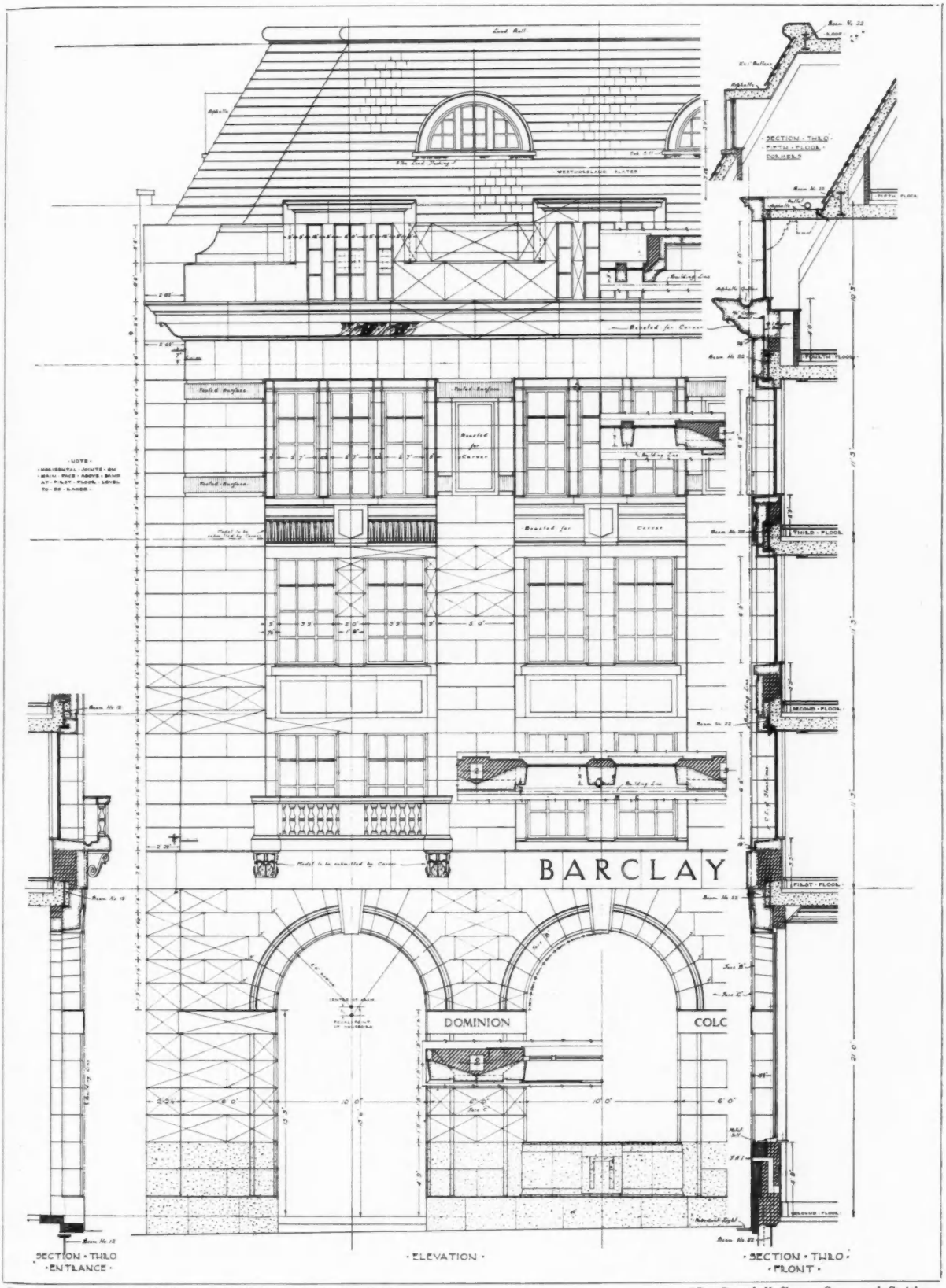
One of the metal windows of the main front. The view shows details of the balcony above, and the decorative motive cut into the granite plinth.

THE CALTON CRAG SITE

Mr. A. Nicol Bruce, secretary of the Royal Incorporation of Architects in Scotland, on December 10 sent, on behalf of a number of societies, an emphatic protest to Lord Provost T. B. Whitson against the Calton Crag site being used merely to accommodate Government branch offices and a court house. It was understood that the First Commissioner of Works was to confer in Edinburgh on December 16 with the Town Council and Sheriff Court House Commissioners as to the proposed new buildings.

Mr. Bruce, in his letter, points out that "without a competition open to all architects in Britain, the opportunity will be lost of making the buildings representative, within and without, of their importance as the centre of Scottish Government, and worthy of the architectural traditions of the City of Edinburgh. . . ."

The letter was sent by Mr. Bruce on behalf of the St. Andrew Society, the National Council of Women (Edinburgh Branch), the Cockburn Association, the Edinburgh Women Citizens' Association, the Royal Incorporation of Architects in Scotland, the Society of Scottish Artists, and the Greater Edinburgh Club, and represents the views of 10,000 active members. The Town Council also recently voted for an open competition.



Barclays Bank, D. C. & O. Branch, Gracechurch Street, E.C.] [*By Campbell Jones, Sons, and Smithers.*

The architects' detail drawing of a portion of the main front, in elevation and section, including a typical window as illustrated in the photograph reproduced on the facing page.



Barclays Bank, D. C. & O. Branch, Gracechurch Street, E.C.] [*By Campbell Jones, Sons, and Smithers.*

The architects' plans of upper floors—second to fifth, inclusive. The features of the third are the committee and directors' luncheon rooms, service to the latter being from a servery connected by lift to the kitchen on the fifth floor, whereon living accommodation is also provided.



In the banking hall the counters run parallel with the main front to Gracechurch Street. There is a high dado of mahogany, inlaid with ebony, with fibrous plaster finish to the walls above. The public space is floored with rubber and marble.



Barclays Bank, D. C. & O. Branch, Gracechurch Street, E.C. [*By Campbell Jones, Sons, and Smithers.*

The directors' luncheon room, on the third floor, is panelled in oak, adapted from panelling in existence in the building which formerly occupied the site. The doorway in the far wall leads into the adjoining committee room.

a servery connected by lift to the kitchen on the fifth floor, whereon living accommodation is also provided.



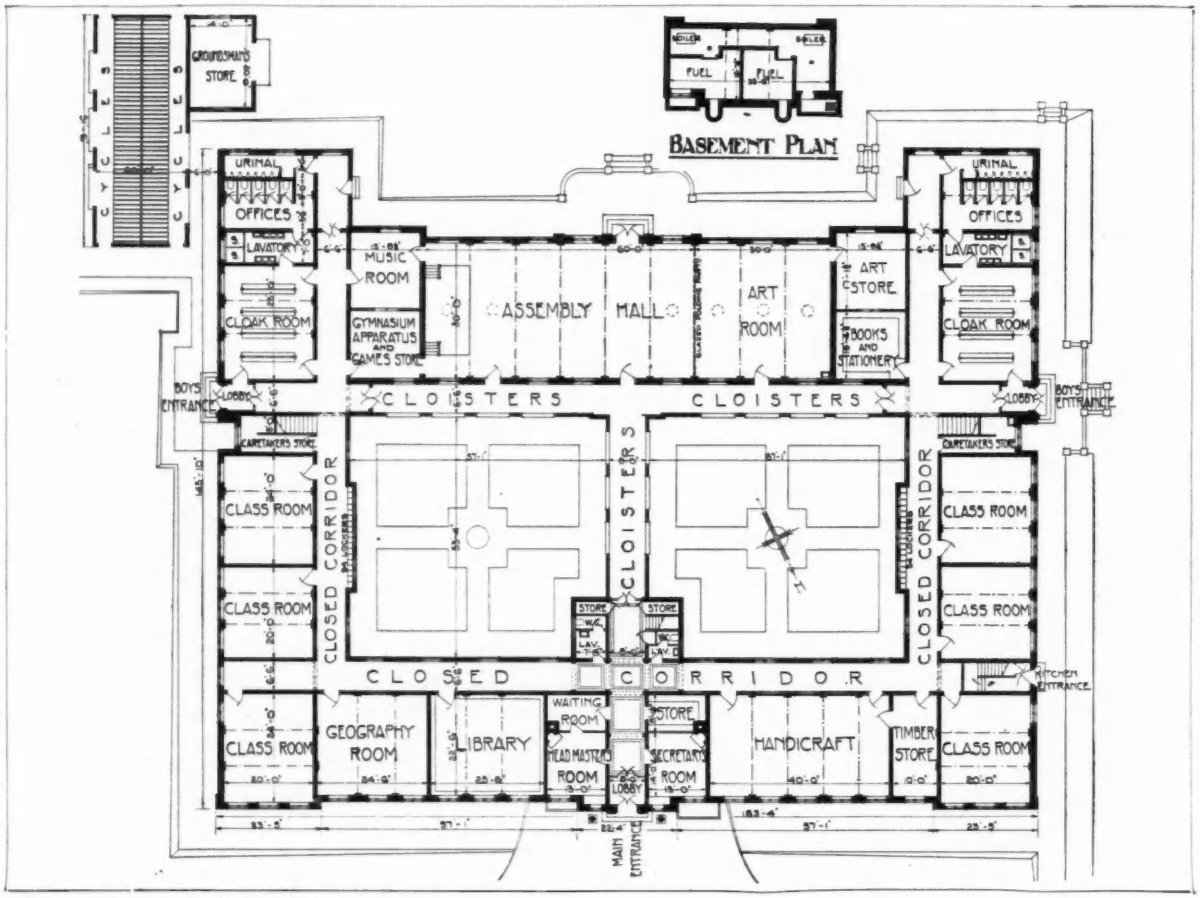
A general view of the school buildings from a southerly view-point. The central doorway leads straight into the assembly hall ; to right and left are lavatory blocks, while the separate building on the right is the groundsman's store and bicycle shed.

NEW BOYS' GRAMMAR

DESIGNED BY

IN designing the New Borden Grammar School for Boys, at Sittingbourne, Kent, the aim of the architect has been simplicity. As regards the exterior, voids and solids are combined to convey a sense of proportion and shapeliness; the arrangement of the internal courtyard, however, strikes a novel note, with the simple brick arcading of its cloisters, intended to provide a retreat for the studious.

The number of boys required to be accommodated was in the first instance 255, to be eventually increased to 370. Nine classrooms were therefore necessary. The site was of some nine acres, and, in view of the present tendency towards increase in both the numbers and the size of rooms, the rectangular plan was decided upon as providing the greatest facilities for supervision and the change-over of classes. In addition to classrooms there are a library, a handicraft room and physics and chemistry laboratories, as well as an extensive range of other accommodation. The



Borden Grammar Schoo for Boys, Sittingbourne, Kent.]

Plan of the ground floor. The rectangular form, enclosing a courtyard, edged and spanned by cloisters or closed corridors, was adopted to simplify supervision and interchange between classrooms. The basement heating chamber is below the main entrance.



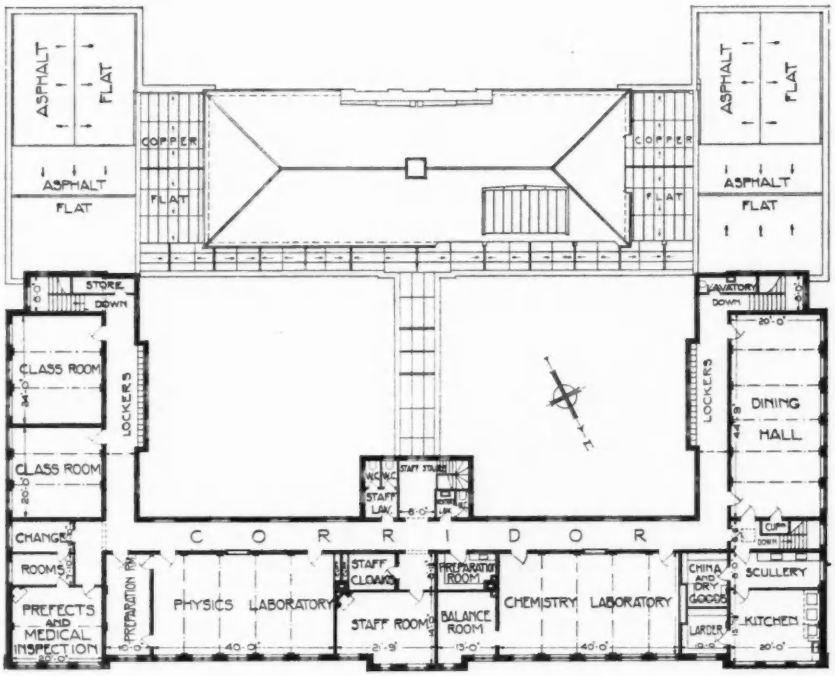
The northerly main entrance front ; and the adjacent easterly side. Immediately to left and right of the entrance lobby are rooms for the headmaster and the secretary, flanked by the library and geography room, and by the handicraft workshop, respectively.

SCHOOL IN KENT

W. H. ROBINSON

assembly hall and art room are adjoining, and separated only by a folding partition. The assembly hall is fitted up for use as a gymnasium. All rooms have the maximum of light and air, and there is the usual up-to-date accommodation as regards showers and foot-baths.

Multicoloured bricks of local origin are used for the walls, and the roofs are finished with tiles from Ashford. Above the assembly hall is a glazed lantern. The whole building is wired for electricity, but at the present time lighting is by means of gas. Low-pressure hot-water heating is installed. A portion of the site has been laid down with tar paving as a playground for use by the boys, and on this tennis courts have been marked out. Ample storage room has been provided in various parts of the school; and bicycle accommodation and a store for the groundsman are provided in a separate building in the south-west corner.



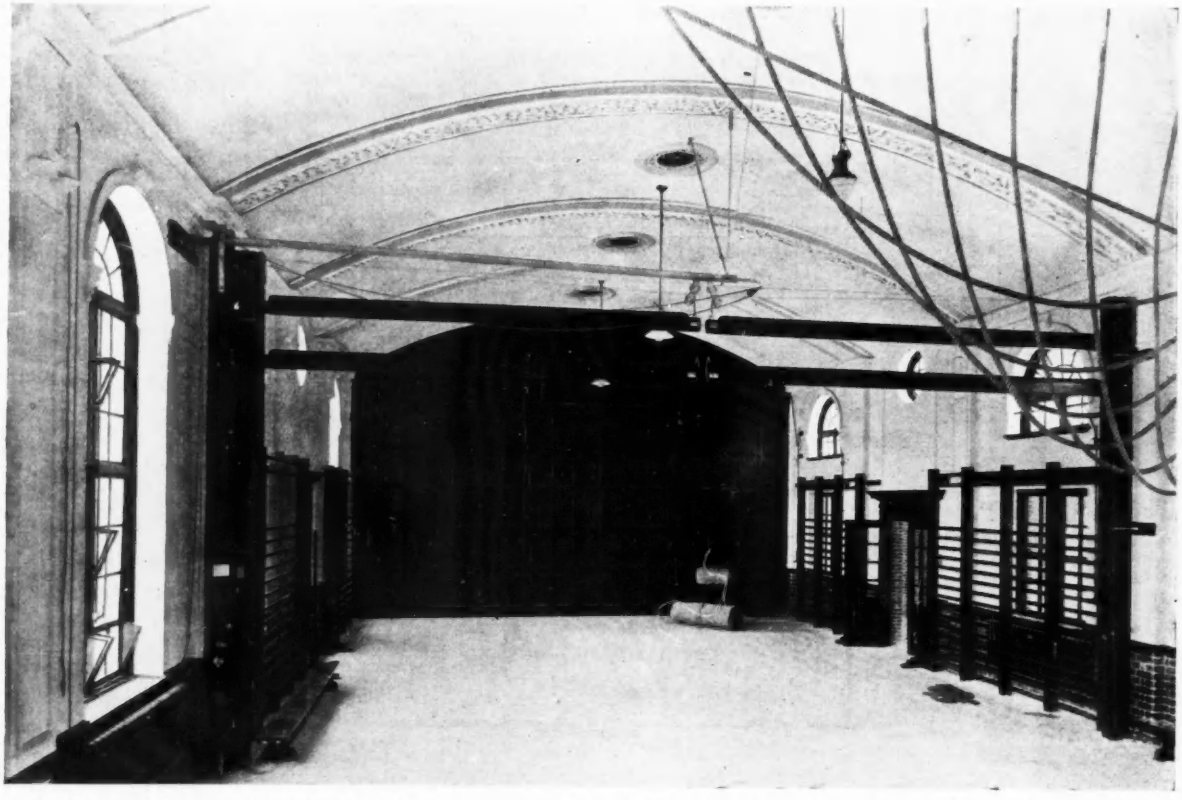
[*By W. H. Robinson.*

First-floor plan. There is no upper floor above the assembly hall wing, but laboratories, with their accessories, occupy most of the main frontage, while a dining hall, kitchen, etc., are balanced against classrooms on two sides of the courtyard.



A view from the easterly half of the courtyard, looking west, and showing the brick arcading of the cloisters, with the lantern over the assembly hall, and the north roof-light of the adjoining art room.

Borden Grammar School for Boys, Sittingbourne, Kent.]

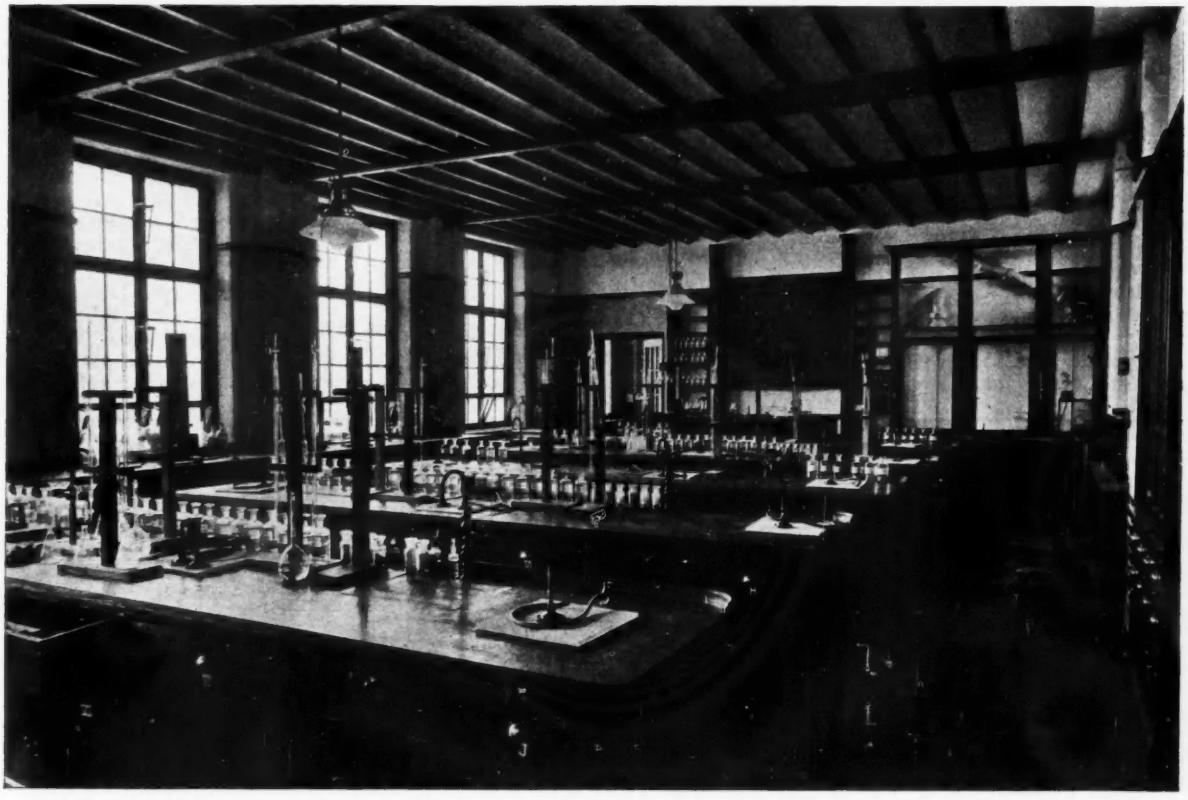


In the assembly hall, which is fitted up for use as a gymnasium. Folding partitions of wood are provided, and one of these divides it from the art room.



One of the closed corridors that branch right and left from the main entrance hall and give access to the classrooms, etc. Either corridors or cloisters surround the whole of the internal courtyard.

[*By W. H. Robinson.*



The chemistry laboratory, on the first floor, looking towards the balance room, seen on the left at the far end. A room of similar proportions is devoted to physics.

HOUSE ON BANSTEAD DOWNS, SURREY

DESIGNED BY PAKINGTON, ENTHOVEN AND GREY





Two views of the garden front taken from the south (left) and the east (right). The dining-room and the drawing-room overlook the garden, access to which is obtained through the three French windows.

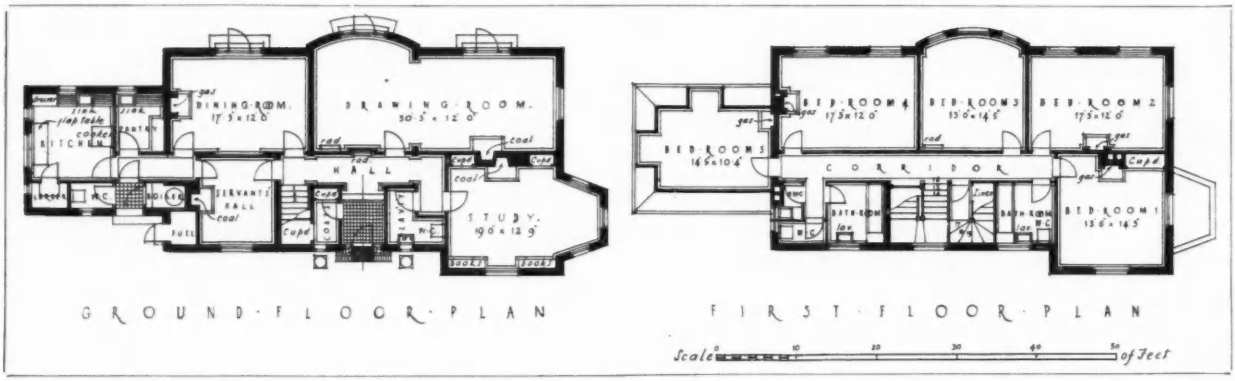
THIS house occupies a sheltered site on the slope of Banstead Downs, Surrey. It is built of brick, the external walls being distempered a pinkish cream, relieved by a black plinth. The roof is covered with brown sand-faced pantiles, finished at eaves with a black gutter, kept flush with the wall; and the chimney caps are of cast concrete, with short, black chimney-pots. The wood-work is lemon-coloured.

The house is entered through an entrance vestibule, on one side of which is the "coats," and, on the other, a lavatory, into a hall, leading to servants' hall, dining-room, drawing-room and study respectively. Beyond the servants' hall and to the left of the main front are the kitchen, pantry, and boiler-house, all approached from a separate tradesmen's entrance. The dining-room and the drawing-room overlook the garden, to which they are accessible through French windows. There is a detached garage and engine-house.

On the first floor are five bedrooms and two bathrooms, all opening off a longitudinal corridor; and on the second floor three maids' bedrooms and a box-room, lit by dormer windows, are also provided.



The entrance front. The external walls are of brick, distempered a pinkish cream, and have a black plinth. The roof is covered with sand-faced pantiles. Above the cast concrete chimney caps are short, black chimney-pots.



Ground- and first-floor plans. In addition to the five bedrooms shown on the first-floor plan there are three maids' bedrooms and a boxroom on the second floor. There is also a detached garage and engine-house.



ENGLISH PRECEDENT No. 93

BARN,
CHERHILL,
WILTSHIRE

One might do worse than hang this photograph of a simple barn in front of one's drawing-board, so that whenever there arose a problem of design where straightforward precedent was lacking, one might, seeing again how simply and nobly this particular one was solved, reflect that perhaps one was about to make a deal of architectural fuss over something capable of a solution, in its own way simple, and, peradventure, noble.

—[E. MAXWELL FRY.]

THE LANDLORD AND TENANT ACT, 1927

BY W. E. A. BULL

For the information of readers interested, the following condensation of a lecture on "The Landlord and Tenant Act, 1927, in Operation," delivered by Mr. W. E. A. Bull at the last ordinary general meeting of the Surveyors' Institution, has been prepared by the legal expert of THE ARCHITECTS' JOURNAL.

THE Landlord and Tenant Act, 1927, came into operation on March 25, 1928. Proceedings under the Act are commenced in the County Court; they comprise actions for compensation for improvements, actions for compensation for goodwill, actions for a new lease in lieu thereof, and actions by mesne landlords under Section 8. The procedure varies with each County Court.

Tenants should approach their landlords with regard to matters coming within the Act, and, if an amicable settlement cannot be reached, they should serve a notice, under Sections 4 or 5, three years rather than one year before the expiration of the existing tenancy.

The exercise of any of the rights conferred by Part I. of the Act must be preceded by a claim or notice. The tenant serving a notice on the agent of the landlord must either serve it personally or by registered letter addressed to his place of *abode* (unless the agent is a company). A notice sent by post to the agent's office will not be a good notice, as appears to have been held by the judge in *MacFisheries* v. *Edwards*, a county court decision referred to in *Law Times*, June 8, 1929.

All notices must be strictly served within the prescribed time limits; a notice out of time will be wholly bad and cannot be extended so as to become good.

As to the form of notices (as distinct from claims) no particular form is laid down, and provided it is in writing, signed by the party giving it or his agent, that is sufficient.

With regard to claims, however, Rule 2 (1) lays down the requisites for the notice. The language of the rule is imperative, and if it is not complied with the notice may be bad. (See *D. R. Evans, Ltd.*, v. *Coleman*, THE ARCHITECTS' JOURNAL, September 18, 1929.)

The provisions of the Act as to improvements are contained in Sections 1, 2 and 3. A tenant wishing to make an improvement must conform to the provisions of Section 3. This section lays down that he must serve upon the landlord notice of his intention to make an improvement, together with a plan and specification. (*Baldwin* v. *Garrett*, L.J., November 3, 1928.)

If within three months from the service of the notice the landlord serves notice of objection, the tenant may apply to the tribunal for a certificate that the improvement is a proper improvement.

No certificate will be granted if the landlord proves he offered to execute the improvement in consideration of a reasonable increase in rent, nor if the improvement would contravene any restriction imposed for the purposes detailed in the provisos to Section 3, sub-section (4), (*a*) (*b*) and (*c*).

A tenant who has made a duly authorised improvement will, at the termination of his tenancy, on quitting his holding, be entitled to apply to the tribunal for compensation. (See *Dale* v. *Hatfield Corporation*, 1922, 2 K.B., 282, at page 297).

It has become a common practice where a new lease is granted, and the tenant desires to execute improvements, to make these a consideration for the grant of the lease. It was pointed out that the improvement must not have been made less than three years before the end of the tenancy.

As to "goodwill," a tenant's rights to claim compensation for loss of goodwill are contained in Section 4. Briefly summarized, such a right will accrue at the termination of the tenancy, on quitting the holding, if the prescribed formalities are observed; but the compensation may be reduced or extinguished if the landlord intends to demolish the premises or use them for a different and more profitable purpose. As to the amount of compensation, the sum to be paid is not to exceed the addition to the value of the holding which is the direct result of the tenant's trading.

Goodwill is not defined, but it must have the effect of increasing the rental value of the property before compensation becomes payable.

Before a claim for compensation for goodwill can arise, the business must have been carried on either by the tenant or his predecessors for not less than five years. In the case of a tenancy which will expire by effluxion of time, Section 4 is not clear as to the date from which this period must be computed. A tenant must in such a case make his claim not less than twelve months from the termination of the tenancy, and all the conditions of the section must be fulfilled at the time of making the claim. A tenant must serve his notice claiming compensation within one month from receipt of notice to quit when his tenancy is so determined.

The provisions of the Act relating to renewals in lieu of compensation are contained in Section 5. If the landlord offers to sell his interest to the tenant, such interest being, in the opinion of the tribunal, of sufficient duration, or offers suitable alternative accommodation at a reasonable rent, no lease may be granted. The application must be made within the prescribed time.

The onus of proof, except the service of notice of claim, would seem to be thrown on the tenant only if he is the applicant.

Instead of claiming compensation, the tenant can claim to have a new lease granted to him. A tenant is not entitled to a new lease unless he is entitled to compensation; he is not entitled to compensation unless he has served the requisite notice claiming it.

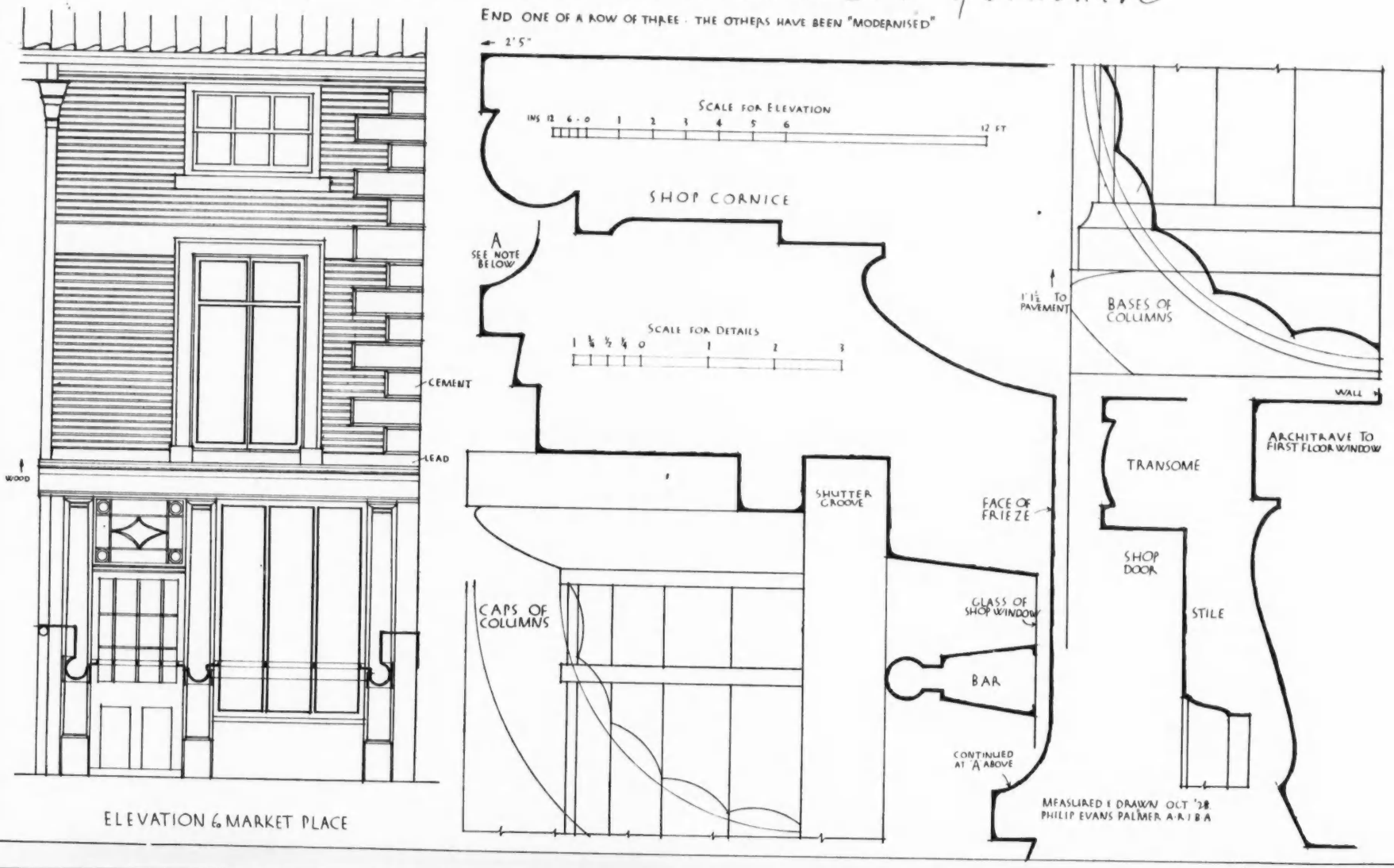
It is most important that any intermediate landlord who receives any claim or notice from a tenant should at once serve copies on his superior landlord. Failure to do so may involve him in serious liabilities.

With regard to contracting out of the provisions of the Act this is possible so far as Part I. is concerned. It must be for adequate consideration unless the contract is dated prior to February 9, 1927; but impossible so far as regards Part II., except in one instance. Whether the Act applies to a statutory tenancy is by no means certain.

Part II. of the Act is of general application, and deals with (1) Measure of damages for breach of repairing covenants; (2) forfeiture of leases for breaches of covenants to repair; (3) covenants against assigning underletting; (4) covenants against making improvements without licence or consent; (5) covenants against alteration of user without licence.

Shop Front GUISBOROUGH Yorkshire

END ONE OF A ROW OF THREE · THE OTHERS HAVE BEEN "MODERNISED"



ELEVATION to MARKET PLACE

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LITERATURE

RUSSLAND—EUROPA—AMERIKA

In this book Herr Erich Mendelsohn expounds his philosophy, not only of architecture, but also of world problems. Throughout, it is a philosophical comparison of different worlds, magnificently illustrated, and bound together by a running commentary of rhythmical text, somewhat in the manner of Walt Whitman turned modern architect.

Briefly, Herr Mendelsohn is a follower of Spengler. In this book, as in *Der Untergang des Abendlandes*, America, following the great "Faustian" culture of nineteenth-century Europe, is seen as developing this culture to a point where it becomes mere mechanistic civilization; where evolution reaches its highest point and begins gradually to weaken, and the vigorous ideas of the European West begin to decline into an orgy of pomp and magnitude comparable to the Mausolean period of Greek architecture. Himself a "Faustian," Herr Mendelsohn regards himself as a prophet, not indeed of evil, but of inevitable decline.

Russia, he finds, however, remains undeveloped, touched only on the fringe by Western ideas, an eternal riddle waiting only to be fructified by the seeds of the decadent "Faustians" to commence a new era.

To quote from his own preface: "This book is not political: but politics and social economy are the essential basis of its architectural survey. It regards Europe as lying between the two great impulses of Russia and America. . . .

". . . it sees in the Russian sacrifice the elements and beginning of a new order, not merely a variety of political adolescence.

. . . . . .

"Russia, now and always, is a riddle. America is alone ruler of the world."

The great war is the turning point. It is the beginning of America's power over the world, of Russia's awakening from lethargy; and the moral of both these social revolutions is pointed and adorned by excellent photographs: America's architectural, paralleled by her political, development is traced through the early houses of the colonial style, the brown-stone fronts of New York, the raw industrialism of the '80's and '90's, to the temples of commerce of the present day, the Hollywood Terminal, the Barclay Vesey telephone building, the Pittsburgh Cathedral of Learning, rising to fantastic heights of *unerhoertem Pomp*. Russia's development is traced through the wooden churches and peasant huts of immemorial design; through the great cathedrals of Moscow and Kiev, the palaces of St. Petersburg, to the gradual sloughing of Eastern and European influences in the glass and steel erections of Harkov and Leningrad.

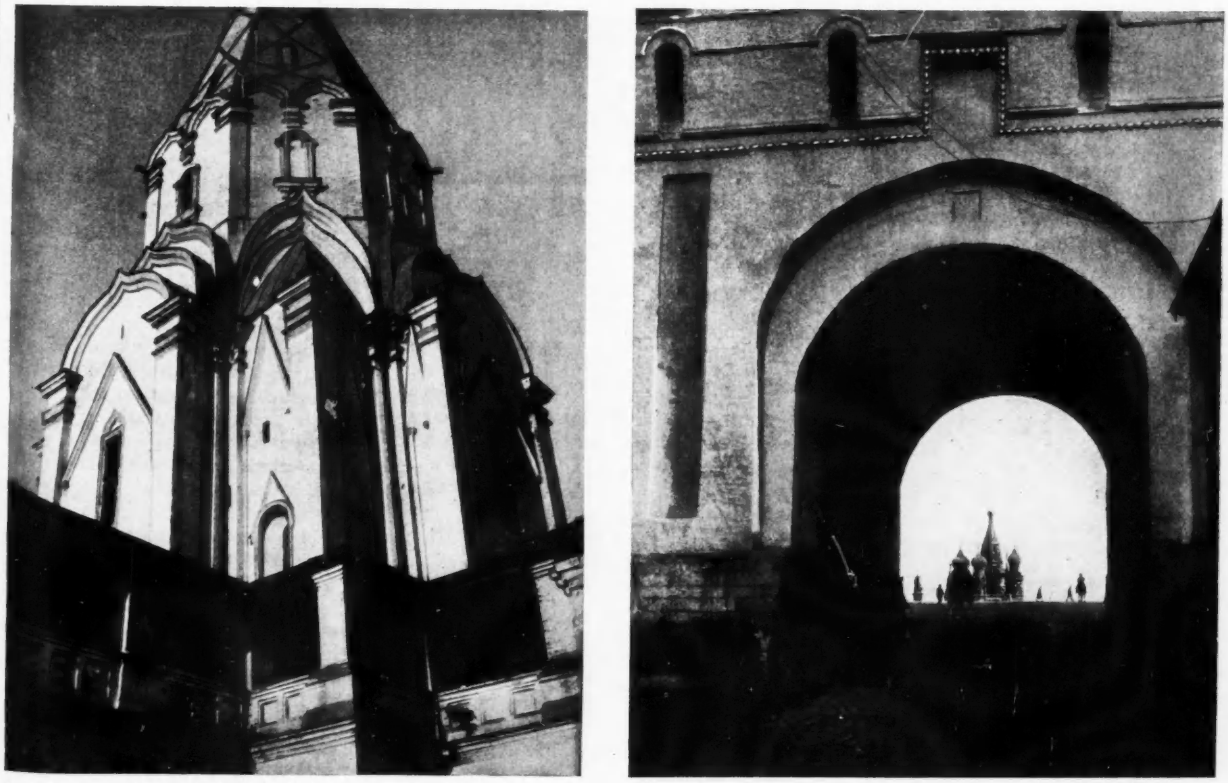
Europe, weary after her struggles in the world war, unable to control the riches of America or the social revolutionary forces of Russia, is now, as always, the forcing house of individual genius, and receives more cursory treatment.

Herr Mendelsohn is a special pleader. Having one idea in his mind he bends every architectural feature of the three cultures of his choice to fit in with it, and, in so doing, is scarcely fair to Europe at large and his own country in particular. Further, he does not appear to consider the possibility of the wildly modernist ideas of the city Russian being merely a phase that will be swept away by the vast and conservative peasant mass behind them. Nevertheless, it is an extraordinarily interesting book, revealing as much of modern Germany in its text and philosophy as of Russia and America in its excellent illustrations. L. F. E.

Russland—Europa—Amerika: ein architektonischer Querschnitt. By Erich Mendelsohn. Berlin: R. Mosse Buchverlag.

THREE ROWS OF TAPE

An architect who became an able seaman during the war is likely to



From Russland—Europa—Amerika.] [*By Erich Mendelsohn.*

A modern church tower (left) and the entrance to the Red Square, Moscow (right).

prove an instructive observer of the Navy if, like Mr. Trystan Edwards, he has won attention on his own professional themes. *Three Rows of Tape* is a book of first-class interest. In subject, in exposition, and in the light thrown by its principles on society, on education, and even upon architecture, it is extraordinarily stimulating. Finding in the Navy "an oasis in the desert of commercialism, a refuge from those elements in our civilisation of which we are most ashamed," Mr. Edwards describes the men, the life, and the principles which combine to produce this exhilarating spectacle.

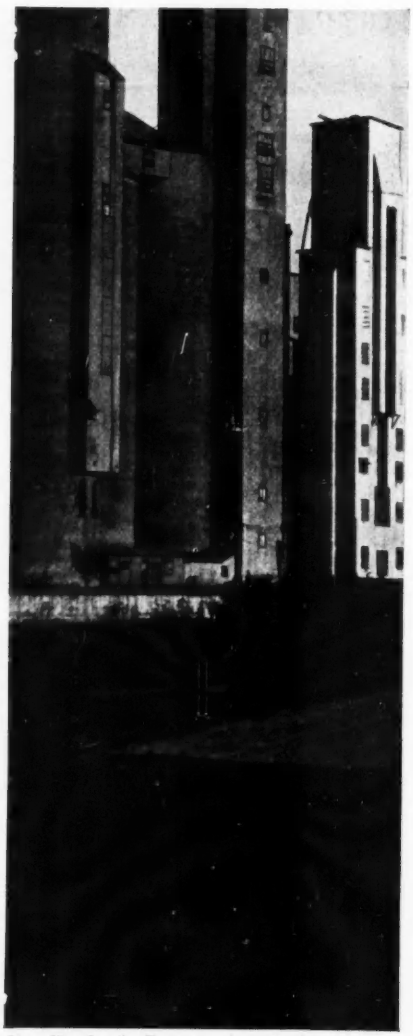
The core of the book consists of two chapters on "Rank and Manners" and on "Naval Æsthetics," to which reluctantly we must confine ourselves here. Rank and discipline in the Navy create an aristocratic society; the whole is designed for a noble end; and it is no abuse of words to speak of the architectural principles that such a society displays. On this foundation rises a social and artistic structure culminating in a certain idea of style, which bears witness to basic contentions discussed in the author's previous books; in, notably, *The Things Which Are Seen*.

The Navy is not satisfied with bare utility. It insists on a superfluity of finish, both in form and action, in order to display the vigour on which each depends. Just as the mediæval mouldings display the "superfluous substantiality" of the substances used, so the Navy delights to express not only power but its pomp and parade as well. Hence its regard for appearances in all matters, small or great. The uses of its ceremonies, its visual regard for style in matters of routine, its insistence on uniformity, on "the profound æsthetic principle that at the point where individual taste ends there style begins"; the architectural qualities of the mess-deck; the "distinction" of a ship's fittings; how the bluejacket's critical interest in battleships, which "take the place of architecture for him," compares with that of the average civilian; the artistic quality of the uniform, and lastly the human type produced by the Navy, are discussed with a directness and brevity to which one cannot but listen because the theory is drawn from the practice of experience, and not the other way round.

Since the Navy is made for use and not for show, and can afford to take no risks with the sea at any time, its practice and its theory are inseparable. Thus all aspects of it become interesting, and the other chapters on "Domestic Reactions," "Religion," "Naval Politics" and the rest yield only less material. No man or boy who starts this book will put it down till he has finished, or lay it aside without considering the suggestions of wider application that the author makes. The book is so pregnant and so clear that, finished too quickly, it leaves us convinced that Mr. Edwards knows far more than he has cared to tell. For people who have lost contact with reality *Three Rows of Tape* will prove a lighthouse, set on a rock and sending its rays a long way round.

OSBERT BURDETT

Three Rows of Tape: A Social Study of the Lower Deck, 1915-18. By A. Trystan Edwards. Heinemann. 6s.



From Russland—Europa—Amerika.]

A Granary at Buffalo.

BURFORD PAST AND PRESENT

Mrs. Sturge Gretton is to be congratulated upon the revision—and much of it is new—of her first edition of *Burford Past and Present*. The author expresses, what many have felt, when she says: "Broadway and Chipping Campden possess buildings without rival in Burford, but those places have not Burford's general obscuredness; they have been revived and restored consciously. Burford, with fewer outstanding beauties, has retained its ancient entity; and that is the reason why the total of it is greater than the sum of its features."

"Through the ten centuries of its existence Burford has never been dominated by a Squire." "First the Guild, and then the Corporation, were the town's masters. And the spirit of that long-continued self-government has proved ineradicable." Foreigners within Burford's gates are not essential to its vitality. This civic consciousness which Mrs. Sturge Gretton claims for Burford is surely that which our towns must foster and regain if they are to be saved unspoiled.

The beginning and growth of Burford is an intimate story and full of interest, as the tale of houses and of the people who have lived in them must always be when told with that love of place which is so evident throughout this book.

In chapter seven Mrs. Sturge Gretton reminds the reader that the restoration of Burford's Church in 1876 was responsible for the now famous controversy between William Morris and the then Vicar, Mr. Cass, which prompted the formation of the Society for the Protection of Ancient Buildings. "William Morris, in controversy as in all else, moved on large lines, like a man of his own sagas; Mr. Cass, in debate, was no pigmy also; and the tale of their contest is fittingly ended with the saying of Mr. Cass, told us by Miss Morris as having afforded her father much pleasure, 'The church, sir, is mine, and, if I choose to, I shall stand on my head in it.'"

Of the passing of such master craftsmen of Burford as James Drew, who knew the value of stone as an artist; of Henry Taylor, the cabinet maker, and of Henry Bond, who "righted locks and mended water pipes because his bell founding had fallen away," Mrs. Sturge Gretton speaks with feeling. "Master men, caught between capitalism on the one side and the modern price of unskilled labour on the other side of them." Inferiors in their crafts, able to raise some money, built "businesses," while Taylor, Bond and Smith lifted, carried alone, and died of, worn-out hearts. Great men, these, representative of the too great company of worthy craftsmen passing and not being replaced.

Of master craftsmen, there was one I had hoped to meet in Mrs. Sturge Gretton's company, Master Mason Christopher Kempster, for he died at Burford, full of years and honour, as is recorded on the mural tablet on the north wall of the south transept of

Burford's Church. Much of the stone used in the building of St. Paul's Cathedral came from the quarries close to Burford, which are still known as Christopher's or Kitt's quarries.

I hope many will spend, as I have, a happy and profitable hour with *Burford Past and Present*.

THOMAS FALCONER

Burford Past and Present. By M. Sturge Gretton, J.P., B.LITT. London: Martin Secker. Price 7s. 6d.

THE ARCHITECT

It is significant of the new attitude towards the choice and training for a career that Clough Williams-Ellis should begin his book *The Architect*, in Geoffrey Bles's *Life and Work Series*, by indicating the first signs of his childhood which appear to him now as definitely tending towards architecture. An introduction to a profession on these intimately autobiographical lines has many advantages over the cut-and-dried "students' handbook," especially when the autobiographer happens to be a man of Clough Williams-Ellis's broadly-developed personality.

In this book we see how childish tendencies gradually developed and how some were pruned away from force of circumstances so that the vitality formerly absorbed by them was diverted into the main stem of architecture.

The author runs briefly but entertainingly through his career at school and at Cambridge, through his efforts to earn a living as a laboratory assistant in electrical engineering and experimental research, to the momentous attack of influenza which, more than anything else, enabled him to oppose the respectable scruples of his family and break away from electricity to embrace architecture.

No sooner had he started to learn architecture at the Architectural Association than an actual job began to occupy his attentions so much that he had finally to leave that school. Previous to this he had been fortunate enough to be "bottle-washer" to a Sussex builder, and doubtless this experience proved the most valuable part of what he calls his "architectural springtime." (One wonders, by the way, what would happen to the average architectural student if his training took this abandoned course !)

His illuminating chapter on the war, quite properly called "The Lost Years," and his account of the years that immediately followed, though perhaps partly irrelevant in a description of the career of an architect, provide much food for thought, and form together a valuable record of a psychological process through which many professional men passed. There follow lively accounts of his subsequent practice, of the realization of his amenity ideals at Portmerion, and the confession that he is essentially happy at his work, ending with a wholesome admonition to the young reader to "Follow your bent."

This is an intimate, readable, and stimulating little book.

The Architect. (Life and Work Series.) By Clough Williams-Ellis. Geoffrey Bles. 5s.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

Mr. Day asked the First Commissioner of Works whether he had arrived at any further decision with reference to additional lighting for Hyde Park and the other Royal parks.

Mr. Lansbury said he had arrived at certain conclusions as to the need for extra lighting in Hyde Park, and he hoped shortly to be in a position to put his proposals into effect. The question of providing additional lighting for the other Royal parks did not arise to the same extent.

Mr. Day then inquired of the First Commissioner whether his attention had been drawn to the large restaurants which were established in the Bois de Boulogne in Paris and also in the principal parks in many other large Continental cities; and would he consider granting facilities for the erection of like establishments in Hyde Park ?

Mr. Lansbury said that existing arrangements would come under review on the termination of present contracts, and such improvements as were considered necessary would be made.

Dr. Morgan asked the First Commissioner of Works whether he would cause an investigation to be made by his department as to the metallic-locking sockets in use on the steel scaffolding now in use on the Houses of Parliament and their comparative safety and efficiency; and whether he was aware that certain tests demonstrated that the present type of sockets used by the present contracting firm did not hold and that there were great doubts as to its safety.

Mr. Lansbury said full consideration had already been given to the types of sockets and all other components of the steel scaffolding now in use or in course of erection at the Houses of Parliament, and no section of the scaffolding had been or would be accepted for use from the contracting firms concerned unless and until the Department was satisfied that it was satisfactory in all respects.

Colonel Howard-Bury asked the Postmaster-General whether he would in future accede to all reasonable representations to remove wires placed over houses; and, if not, what steps could the private person take to get them taken down ?

Mr. Lees-Smith said that the Telegraph Acts provided for the removal or alteration of wires interfering with building or other alterations to a house; and all bona-fide applications for removal of this character were complied with. The interests of the public service would not, however,



From Burford Past and Present.] [*By M. Sturge Gretton.*

The Hill, West Side, Burford.

permit him to forgo the right conferred by the Acts to run wires over houses.

Mr. Greenwood informed Mr. Day that work was in progress during the twelve months ended 30th September last on ninety-seven slum-clearance schemes, three of which were confirmed in that period. The numbers of properties affected and of persons rehoused during those twelve months could not be stated, but, in all, 1,787 houses were provided, eleven schemes were completed during the twelve months, and these schemes involved the demolition of 758 properties and the provision of rehousing accommodation for 3,192 persons. The ultimate annual Exchequer liability had not yet been ascertained.

Mr. Day asked the Minister of Health whether he had received any representations from local authorities to the effect that many tenants occupying municipal houses which were built under Housing and Town Planning Acts were unable through unemployment to pay the present rents; and could he state whether these applications to reduce rents had been approved.

Mr. Greenwood said that under the Housing Acts, 1923 and 1924, local authorities were not required to refer to him when considering applications for reduction of rents. Under the Housing (Town Planning) Act, 1919, certain local authorities had suggested reductions of rents on general grounds, and they had been agreed to in more than half the cases dealt with during the current year.

Mr. Boyce asked the Minister of Health if he could state the date on which his town-planning department was set up; the cost per year since that date; the number of the present staff; and the duties carried out by the department.

Mr. Greenwood said that a division was set up by the late Local Government Board in 1910 to carry out the whole of the work arising under the Housing, Town Planning, etc., Act, 1909; a separate division for town planning only was not created until 1922. The duties of the Town Planning Division comprised the consideration of questions of town planning policy, the approval of town planning schemes and matters incidental thereto. The staff at present numbered twenty-six. The cost for each year since 1922 was approximately as follows:

1922–3	£8,050
1923–4	£8,300
1924–5	£9,300
1925–6	£10,600
1926–7	£10,800
1927–8	£12,500
1928–9	£12,500
1929–30	£13,200

LAW REPORTS

RESTRAINT OF TRADE

Trustee of the Arden Estate v. *Stone. Chancery Division. Before Mr. Justice Romer*

This was an action by the trustee of the Arden Estate against Mr. C. H. Stone, the tenant of the shop and dwelling-house, 24 Essex Road, Islington, to recover possession of the premises upon the ground of a breach of a term in the tenancy agreement, under which defendant agreed not to carry on any business there other than that of china, glass and hardware merchant. Plaintiff's case was that the defendant was conducting the business of a draper, as he was selling carpets and rugs, etc.

Defendant by his defence denied that he had been guilty of any breach of his agreement, and submitted that it was the custom of hardware merchants to sell these articles. This business was that of a furnishing ironmonger. Defendant further pleaded that plaintiff had known for several years that he had been selling such goods.

Mr. H. O. Danckwerts argued the case for the plaintiff, and the defendant conducted his case in person.

His lordship held that the defendant had committed a breach of agreement in dealing in carpets, rugs, blankets, curtains, etc., and carrying on a drapery business. Plaintiff was entitled to recover possession with rent up to date and costs. His lordship added that he had a feeling of uneasiness as to whether if the defendant had been represented by counsel he might not have made more of his defence, founded upon the custom of the hardware trade, and the plaintiff's knowledge of the fact that he was carrying on the business complained of for a long time past.

DISPUTED WIDTH OF A ROAD

Attorney-General v. *Whitehead. Chancery Division. Before Mr. Justice Luxmoore.*

This action had reference to a road at Hawarden, and had been before the court on a previous occasion. The land was the gift of the Gladstone trustees, and at the instance of the Hawarden Rural District Council the Attorney-General sought an injunction against the defendant, Mr. S. P. Whitehead, of Wood Lane, Hawarden, to restrain him from erecting a fence on the public highway from Brackley to Hawarden, and for a declaration that the highway was 30 ft. wide.

For the trustees, evidence was given that the intention was that the road should be a 30 ft. one, and the defendant withdrew his opposition to the declaration, if the line of roadway could be agreed. There, however, had been some disagreement; and the matter came again before his lordship.

Sir Thomas Hughes, K.C., for the Attorney-General, said when the defendant agreed not to further contest that there had been a dedication of a 30-ft. highway, the other side said they would not complain if they got 28 ft. 10 ins. at a point where the road narrowed. Seeing that there could not be a consent judgment, counsel asked for a declaration that the road was 30 ft. and an order on the defendant to remove his obstruction.

His lordship said he provided that the surveyors were to lay out the road and to consider any suggestions of the defendant, and give effect to them as far as they reasonably could. The defendant owned the land on both sides of the road, and if he wanted a foot or two on the north side or the south side, that would be considered, but the surveyors were to be masters of the situation.

Mr. Montgomery, K.C., for the defendant, said it appeared that the surveyors were left to take 15 ft. on one side of a line or the other. The road had a grass verge; the road was to be 30 ft. wide, not 15 ft. from the centre. That left the surveyors, if the macadam was 17 ft., to take 15 ft. on either side of a line as suited them. He could not consent to that, and preferred to have the judgment without it. Nothing had been done to lay out the road, and that should be done, as the court directed, so that there was no ground for dispute hereafter; and it should be provided that the road was to be deemed to be the road mentioned in the pleadings.

His lordship directed that the road should be laid out forthwith, and if there were a serious objection to the sides of the road at any point, the defendant could come along and say the side was not right. The macadam, which followed an old cart track, was not always in the exact centre.

ARCHITECT'S CLAIM FOR FEES: NEGLIGENCE ALLEGATION

Shipwright v. *Lidiard. Official Referee's Court, High Court of Justice. Before Mr. G. A. Scott*

This was an action by Mr. Wm. Geo. Shipwright, an architect and surveyor, of St. Peter's, Broadstairs, against Sir Herbert Lidiard, of St. James's Street, London, a building owner, to recover the sum of £1,537 for professional fees in connection with the development of a building estate at Maybury, Woking, Surrey.

Plaintiff's case was that he was to receive 2½ per cent. on the cost of the

enterprise, and he claimed his professional fees on the ground that, after 12 houses had been erected, the defendant refused to go on with the scheme.

Defendant complained that there had been shrinkage in the houses, causing cracks in the walls, and alleged that the material was not suitable, and he counter-claimed for damages for alleged negligence. Plaintiff (who advised its use, defendant alleged) said the material was suitable.

Mr. Harold Simmonds appeared for the plaintiff; Mr. Stewart Bevan, K.C., Mr. L. James and Mr. Rickard, for the defendant.

The hearing of the case lasted some six days.

The Official Referee, in giving judgment, said the dispute was between a building owner and an architect, and was about a building scheme at Maybury, near Woking. The first issue was, what was the retainer of the plaintiff? The second was, when the defendant abandoned the scheme, was he entitled to say to the plaintiff, "You have behaved in such a way over the first twelve houses"? that was, "You have been guilty of negligence, and I cannot entrust you with the continuance of the scheme." The third issue was, if that be so, to what damage was the defendant entitled, as against the plaintiff, for the negligence?

The first issue was the retainer. In view of the whole facts, he thought the architect had proved his retainer for the whole scheme, and when the defendant abandoned it the plaintiff could say that he had been prevented from earning his money for the whole scheme. This was the natural inference to draw from the document and from the confusion that arose between the builder's rights and the architect's rights. In these circumstances, apart from the question of negligence, it would entitle the architect to succeed on the first head and the main head of the claim.

The second issue was that of alleged negligence, which was a serious and disagreeable one. The architect had recommended the use of a certain material, which went wrong, and the Official Referee thought in doing so he was not exercising either proper skill as an architect in seeing that the materials were proper, or proper care in seeing that the materials he used should not cause an injury to the building owner. A professional man was not entitled to speculate at the risk of another, and he could not help thinking that the architect acted in going into this and advising his building owner to do this, in a way that was not at all in accordance with his duty to take reasonable care and to exercise reasonable skill in protecting his building owner. Therefore, he had no alternative except to say that the plaintiff was guilty of negligence, and the negligence was of such a character that, in the Official Referee's opinion, the building owner was entitled to say, "I will not entrust you with any further operations because you have done a thing which makes me doubt your judgment, and doubt your care of my interests as an architect. I therefore must dismiss you."

The next point was that of damages, and on this point he found in favour of the defendant.

There would be judgment for the defendant on the claim with costs; judgment for the defendant on the counter-claim for negligence with costs, and a declaration that the plaintiff was liable to the defendant in negligence on the counter-claim, but, the builders and the Aerocrete Co. agreeing to do what they could to put the place right and make good the cracks and decorations, no further order would be made except liberty to apply in six months.

READERS' QUERIES

SUSPENDED FLOOR

T. Y. writes: "*What minimum load per foot superficial can be assumed for a suspended floor, 55 ft. by 20 ft., to be utilized for dancing and parties?*"

The L.C.C. standard load for the conditions named is 150 lbs. per sq. ft. F. C.

TUCK-POINTING

F. A. T. writes: "*Can you give me a description of the method of colouring, red, an old brick-fronted house and tuck-pointing the same? What is desired is something that will stand the weather.*"

The ordinary method of staining and tuck-pointing old brickwork is given in any book on building construction. Mitchell, vol. i, page 80, gives a full description. If something more weather-resistant is desired, something combining waterproofing effect on old porous brickwork, painting the whole surface of bricks and joints (after flushing up the latter as for ordinary tuck-pointing) with Koverkrete in any colour desired, and marking over with joint lines of the same material might serve the purpose. Samples of brickwork so treated can be seen at the works of the makers, Messrs. R. Gay & Co., West Ham.

E. G.

SEASIDE ENTERTAINMENT PAVILION

L. R. writes: "*I wonder if you could inform me as to the price per cubic foot usually taken for a seaside entertainment pavilion? The following is the approximate accommodation required — Basement: Kitchens and store, restaurant and conveniences; Ground floor: Auditorium for 1,000 people, retiring rooms behind stage, and the usual entrances. First floor: Gallery for 500 people and restaurant. The building would be steel framed, brick faced three sides and stone one side, concrete floors and slate roof. The finishings would not be elaborate.*"

The cost of buildings of this character is more safely based upon the price per seat of the suggested capacity than upon the price per foot cube. The large void is inclined to render figures very unstable. It has been proved, however, that similar buildings have recently worked out at £30 per seat, exclusive of carpets, etc., but including seating. In some instances the cube of the public hall portion has worked out as low as 9d. per foot. It is suggested that in this case the hall be cubed at 9d. and the remainder at 1s. 4d. per foot cube, which latter does not allow for work in any way of an extravagant nature. F.

UNDERPINNING A WALL

H. O. R. writes: *Can you give me information as to the standard practice for underpinning and inserting a dampproof course under a wall 20 ft. high resting on damp soft clay with firm subsoil? I am proposing to use two layers of concrete blocks with iron wedge in between, to be driven when cement work is strong enough, with the object of driving the lower block into the soil and causing the weight of the wall to come on it, thus preventing settlement and cracks. Can you suggest any substitute for the wedge or any means by which the wedges can be removed with safety to the work done?*

The method proposed is unusual, and does not seem to offer any obvious advantages over the more ordinary one of excavating alternate 3-foot lengths beneath the base of wall and filling in cement concrete, treating the intervening spaces similarly after those first underpinned have set. It should not be forgotten that the weight of the old wall may be expected to have compacted the soil upon which it stands so that any effort at driving the new foundation into its bed would probably be wasted. It would be advisable to use a Portland cement which tends to swell rather than shrink in setting, and a fairly wet mix with a full trench, so that when ramming is completed the surface is in complete contact with the base of the wall to be supported.

E. G.

ANNOUNCEMENTS

Mr. Leslie Ward has been taken into partnership by Mr. Ernest A. Newton, and the practice will be carried on at the same address: 168 Oxford Road, Manchester.

Mr. S. Sanders, P.A.S.I., Chartered Quantity Surveyor, is now practising at 257–9 Oxford Street, W.1. Telephone No.: Grosvenor 1178.

D

SOCIETIES AND INSTITUTIONS

LEEDS SCHOOL OF ARCHITECTURE

The School of Architecture of the Leeds College of Art is now fully recognized by the R.I.B.A. Students obtaining the diploma of the school will receive exemption from the Royal Institute's Final Examination; the whole of the five years' course taken in the Leeds School being approved for this purpose.

WEST YORKSHIRE SOCIETY OF ARCHITECTS

Mr. G. H. Foggitt presided over a meeting of the above society held at the Hotel Metropole, Leeds, when a demonstration of the possible textural finishes that could be given to exterior cement facing was given by Mr. K. Millard. The processes were described in a running commentary by Mr. G. McLean Gibson. He remarked that a plasterer ordinarily prepared his rendering with a more or less vertical scratched key, with horizontal screeds; but he found that horizontal scratching, and vertical screeds, with the float worked from the bottom, upward, was more effectual.

Some twenty various finishings were demonstrated by Mr. Millard, among them being: Modern American, Californian, Moorish, English Cottage, Mexican, Green Back, and French Brush.

At the conclusion, on a vote being taken, the style of finish under the title of "English Cottage" found most favour among the members present.

TRAINING OF ARCHITECTS

Professor Lionel B. Budden, M.A., F.R.I.B.A., delivered a lecture on "The Development of Architectural Education" before the members of the Ulster Society of Architects at Belfast.

Professor Budden spoke strongly in favour of the development of architectural education under university auspices, as by this means, he said, it could be protected from centralization in London, and thus avoid the danger of one great metropolitan school sucking the rest of the country dry.

He said the scholastic form of training had superseded every other form or system of training in architecture, whether by pupilage or apprenticeship, in the greater part of Europe and America.

The scholastic training at the present time was supplying what tradition did up to the eighteenth century. Nearly all the chief schools of architecture in Great Britain were now established in or affiliated with universities. The universities, in fact, were the only educational institutions in the great provincial centres which could give the requisite authority and prestige to schools of architecture, for they afforded the right cultural environment for the student, and his preliminary education was acquired in an atmosphere of literal studies.

THE CORINTHIAN ORDER OF THE GREEKS

Sir Banister Fletcher, P.R.I.B.A., delivered a lecture, on Wednesday last, at the Central School of Arts and Crafts, London, on the origin and use of the Corinthian Order, which, he said, was Greek by birth and Roman by adoption. He said that some of the early Corinthian capitals were in bronze, a metal worked in Corinth by a certain Callimachus, and thus known as Corinthian bronze; so, therefore, the material may have given the name to the style. Sir Banister considered that, as to origin, it was hardly likely that the new Order was suggested by the anthemion necking of the Ionic capitals of the Erechtheion, because it did not account for the altered shape and increased height. It was more probable that Greek artist-craftsmen, who ever sought some new thing, seized upon the Egyptian lotus and papyrus prototypes at Karnak and Philæ and from them reproduced the bell-shaped capital, sheathed in tiers of carved acanthus leaves and curling calices.

SOUTH WALES INSTITUTE OF ARCHITECTS

At the invitation of the Chairman and the Executive Committee of the above Society, the members attended a tea and discussion meeting, which was held at Cardiff.

The subject arranged was "The Form of Contract and Questions Arising in connection with the Contract Documents," and under the chairmanship of Mr. H. Norman Edwards a particularly interesting discussion took place.

Among those present were Messrs. Ivor Jones, A.R.I.B.A.; T. Alwyn Lloyd, F.R.I.B.A.; C. F. Jones, A.R.I.B.A.; S. Knight Thomas, A.R.I.B.A.; R. H. Winder, M.A., F.R.I.B.A.; W. S. Purchon, M.A., F.R.I.B.A., and C. J. Bartlett.

R.I.B.A. COUNCIL MEETING

Following are notes from the minutes of the last meeting of the R.I.B.A. Council:—

Mr. H. D. Searles-Wood, F.R.I.B.A., was appointed to represent the R.I.B.A. on the Committee which has been set up to make arrangements for the First International Congress for Concrete and Reinforced Concrete to be held at Liége in September 1930.

The Council, by a unanimous vote, elected the following architects to the Fellowship under the powers defined in the Supplemental Charter of 1925: Messrs. W. J. Palmer Jones; D. A. Stewart (Perth, Scotland); L. L. Powell (Brisbane); P. A. Oakley (Melbourne); P. R. Claridge (Adelaide).

The following Probationers were elected as students of the R.I.B.A. :—

Bamber, S. K. (Southend School of Arts and Crafts).
Britton, E. (R.W.A. School of Architecture, Bristol).
Bruce, R. A. (University of the Witwatersrand).
Fraser, J. S. (Edinburgh College of Art).
Gibson, D. E. E. (University of Manchester).
Haddon, D. S. (University of the Witwatersrand).
Miller, J. A. (University of Manchester).
Ormrod, F. J. M. (University of Liverpool).
Patterson, J. (Edinburgh College of Art).
Pullen, R. K. (Architectural Association).
Scott, W. (University of Manchester).
Stirrup, G. (University of Liverpool).
Taylor, D. S. (Architectural Association).
Timmis, G. J. (University of Liverpool).

R.I.B.A. GENERAL MEETING

The following members were elected at a general meeting of the R.I.B.A. :—

Hon. Fellow: Lord Howard de Walden and Seaford. Hon. Associate: Sir Philip Sidney Stott. Hon. Corresponding Member: Wilhelm Wanscher, M.A.

Fellows :

Broad, M. C.
Cowderoy-Dale, F. C.
Harris, P. C.
Hooper, C. O.
Macfarlane, G. G.
Minty, R. J. H.
Mullins, G. T.
Newman, P. C.
Nicholson, F. W.
Stockdale, W.
Strickland, H. C. W.
Vernon, F. A.
Clarke, G. L.
Salmond, W.
Tanner, D. G.
Davies, C. G.
Gunson, E.
Hamilton, G. D.
Jenkins, T.
Liddle, E. F. W.

Associates :

Ashworth, H. I.
Barker, F. (Miss)
Bartholomew, G.
Beck, R. T.
Bradley, F.
Breakwell, J.
Brown, R. S.
Buchanan, J. W.
Bunyan, J.
Collmann, L. J.
Coote, L. F. R.
Crabtree, W.
Crosby, E. L.
Cruickshank, A. J.
Culpin, C. E.
Deolaliker, G. B.
Douglas, P. H.
Dow, J. S.
Dunn, R. R. A.
Ecclestone, J. H.
Eden, W. A.
Ellis, H. G.
Finnegan, L.
Foley, H. V.
Forbes, I.
Fraser, J. M.
Garrett, A. J. W.
Gibb, J. J. B.
Golding, A.
Greenwood, F.
Hall, F. G. A.
Harding, H. J.
Hatcher, B. A.
Helm, W. R.
Holt, A. N.
Hough, G. C.
Jenkins, G. L. M.
King, W. H.
Knight, G. W.
Knowles, H. J.
Lamb, W.
Lane, H. R.
Lewin, H. A.
Lightfoot, B. St. C.
Lovett, W. F. B.
Lowes, A. J. G.
Lowther, A. W. G.
Lubynski, N. F.
MacDonald, E. A. H.
MacDonald, G. S.
McLaren, I. H.
Mansfield, J. L. S.
Mant, C. G.
Metcalfe, J. G.
Metz, M. de
Mitchell, T.
Morgan, B. J. M.
Morris, W. A.
Morrison, R. J.
Mowbray, W. B.
Napolitano, F.
Plant, W. G.
Poulton, D.
Redwood, R. S.
Saunders, G. S.
Scammell, R. Q.
Shewan, W. W. C.
Simpson, A. L. C.
Spencely, H. G. C.
Statham, C. W.
Summerson, J. N.
Sykes, C. G.
Taber, E. A.
Tamkin, A. L.
Thompson, G. L.
Tomlinson, H.
Turner, C. A. C.
Wailes, P. A.
Walkden, J. S.
Waugh, D. S. R.
Williams, G.

STRUCTURAL ENGINEERS AT DINNER

The annual dinner of the Institution of Structural Engineers was held at the Mayfair Hotel, W., on Friday last, under the chairmanship of Lt.-Col. J. Mitchell Moncrieff, C.B.E. Among those present were Sir Banister Fletcher, P.R.I.B.A.; Sir Roland Nugent, Director of the Federation of British Industries; Lt.-Col. C. H. Bressey, C.B.E., Chief Engineer, Roads Department, Ministry of Health; Sir John Hunter, K.B.E.; Dr. R. E. Stradling, Director of Building Research, Department of Industrial and Scientific Research; Messrs. D. Adamson, President of the Institution of Mechanical Engineers; G. H. Parker, President, London Master Builders' Association; and Major R. I. Tasker, President of the Incorporated Association of Architects and Surveyors.

Sir Roland Nugent, proposing "Our Country and Empire," said it was very easy to get enthusiastic about our country and Empire, but it was a great deal more difficult to do more than that. It seemed to him that an impartial body of good, sound, sensible men should be formed to try and think out how the Empire could be bound a little closer together.

Major A. H. S. Waters, V.C., D.S.O., M.C., Vice-President of the Institution, proposing "Our Guests," said they had with them that evening ten chairmen of professional and kindred institutions.

The President, responding to the toast of "The Institution of Structural Engineers," proposed by Mr. Daniel Adamson, said the Institution was formed in a small way twenty-one years ago. Today it was going strong, with a membership of about 3,500.

TRADE NOTES

The floors of the Masonic Temple, Manchester (illustrated in our issue for October 23, 1929) are wax-polished and will be maintained by Messrs. W. Norris and Co., whose "Glipso" polish is claimed to be thoroughly efficient and sanitary. The firm's specialized polishing service is used in many of the largest buildings in Manchester. Ship Canal House, Arkwright House, Chapel Street Telephone Exchange, Allied Newspaper offices, Salford Old People's Homes and Trafford Park Dock offices are typical contracts where Norris's have both polished and are maintaining.

Mr. J. H. Thomas recently opened Messrs. G. and F. Earle's new cement works at Hope, Derbyshire. This building scheme, which includes administrative and works buildings, roadways, bridges, silos, chimney stack and cable mast, has naturally been carried out mainly by concrete. It is claimed by the firm that it will be possible to produce 3,200 tons of ferro-concrete per week from the two huge kilns. In order to crush the very hard limestone, large and massive crushing plant has been installed. The primary steel swing jaw crusher is capable, it is claimed, of handling blocks of limestone weighing up to five tons and reducing them to six-inch cubes and less at the rate of approximately 200 tons an hour. The machine, which weighs 150 tons, is driven by a belt a yard wide from a 250 h.p. electric motor. The limestone for which Derbyshire is noted forms the bulk of the raw material from which the cement will be eventually made.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Barclays Bank (pages 943–947). General contractors: Howell J. Williams, Ltd., who were also responsible for the demolition, excavation, foundations, reinforced concrete, plumbing, joinery and plaster. Sub-contractors: T. Faldo & Co., damp-courses and asphalt; London Brick Co. and Forders, Ltd., Flettons; Farnley Iron Co., bricks; Nine Elms Masonry Co., stone; David Colville, Ltd., structural steel; John Macquire and Green Titherthwaite, slates; P. E. Chappins & Co., daylight reflectors; Art Pavements and Decorations, Ltd., Standard Cork Co., and Macinlop, Ltd., patent flooring; Rosser and Russell, Ltd., central heating and ventilation; Furse & Co., electric wiring and bells; Galsworthy, Ltd., and Engineering Works (Electrical and General), Ltd., electric light fixtures; Shanks & Co., Ltd., sanitary fittings; Stuarts Granolithic Co., Ltd., and Art Pavements and Decorations, Ltd., stair-treads; Chas. Smith, Sons & Co., door furniture and locks; Crittall Manufacturing Co., Ltd., casements; Relay Automatic Telephone Co., telephones; Galsworthy, Ltd., folding gates; C. A. and A. W Haward, iron staircases; T. B. Colman and Sons, revolving doors; Art Pavements and Decorations, Ltd., partitions; Bath Artcraft, Ltd., panelling, screens, and plasterwork; Galsworthy, Ltd., and Chas. Smith Sons & Co., metalwork; Burkle and Sons, and Bath Cabinet Makers, joinery; W. Aumonier and Sons, stonework carving; Fenning & Co., Ltd., marble paving and granite; H. W. Cullum & Co., acoustic ceiling lining; Benham and Sons, Ltd., cooking fittings; Burkle and Sons, office fittings; Waygood-Otis, Ltd., lifts; Buckleys, signs; Luxfer Ltd., lantern and pavement lights.

Borden Grammar School (pages 948–951). General contractor: G. Browning. Clerk of works: W. H. Mercer. General foreman: Mr. Wigmore. Sub-contractors: Concrete, Ltd., fireproof floors; British Challenge Glazing Co., Ltd., patent glazing; Jefferiss & Co., Ltd., wood-block flooring; Yannedis & Co., and Parker, Winder and Achurch, Ltd., door furniture; Brunswick Metal Casement and Engineering Co., metal casements; J. Mallin & Co., Ltd., decorative plaster; Bath and Portland Stone Firms, Ltd., stonework.

House at Banstead (page 952). General contractors: Harry Freeman, Ltd., who were also responsible for the central heating and plumbing. Sub-contractors: Richmond Co., gas fixtures; Bailey and Incledon, Ltd., electric wiring; Ediswan Co., Ltd., electric light fixtures; Goslett & Co., sanitary fittings; E. Davis, door furniture.

Squash racquets court, Hook Heath (pages 964–965). General contractors: Crosby and Son. Sub-contractors: Matthew T. Shaw & Co., Ltd., structural steel; Helliwell & Co., Ltd., patent glazing; G. H. Carter & Co., patent flooring and plaster; Crittall Manufacturing Co., Ltd., casements.

COMPETITION CALENDAR

January 31. For laying-out a portion of the Stokes Bay area as a pleasure resort with public walks and pleasure grounds, for the Gosport Town Council. Application for plan of the estate and a copy of the conditions, with particulars of the prizes offered, will be forwarded on application to H. R. Mangnall, Town Clerk, Town Hall, Gosport. Deposit £2 2s. Latest date for submission of designs: January 31, 1930.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the specifications here enumerated, readers should apply to the Patent Office, 25 Southampton Buildings, London, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

35976. Cuckow, A. E. E. Securing walling, etc., to buildings. November 25.

36636. Humbert, V. A. Slabs for floors, etc. November 29.

36686. Hurden, A. P. Roof, etc., coverings. November 29.

36680. Hurden, E. Roof, etc., coverings. November 29.

36026. Kopelowicz, B. J., and Kopelowiczowa, L. Adhesive for use in building construction. November 25.

SPECIFICATIONS PUBLISHED

294203. Bauer, Dr. B. Reinforced concrete columns.

322099. Soc. Anon. Mecanique Moderne. Apparatus for hoisting material in the construction of buildings.

ABSTRACT PUBLISHED

320105. Heymann, M. Reinforced concrete.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The L.C.C. is to erect an admission hospital at BANSTEAD Asylum at a cost of £57,000.

The CITY OF LONDON Corporation Sanitary Committee is to erect buildings at Charterhouse Street, at a cost of £15,000, to provide adequate and centralized office accommodation.

The Surrey Education Committee is acquiring a site in Chipstead Road, COULSDON, for the erection of an elementary school.

Plans passed by the COULSDON U.D.C.: Shop and four cottages, Godstone and Lower Roads, for Mr. J. P. Oldaker; seven houses, Whyteleafe Estate, for Messrs. O'Sullivan Ltd.; bungalow, Homefield Road, Old Coulsdon Estate, for Mr. M. T. B. Parsons.

The CROYDON Corporation is to purchase land at Chelsham for the extension of the Mental Hospital.

Plans passed by the DARTFORD U.D.C.: Alterations and additions, 2 Spital Street, for Messrs. Williamson's, Ltd.; two houses, Brent Lane, for Mr. J. Corbett and Mr. S. T. Elvey; stores building, Princes Road, for Messrs. Refil, Ltd.; additions, Lloyds Bank, Market Street, for Lloyds Bank, Ltd.; house, Shepherds Lane, for Mr. W. W. Robson; eight houses, Stanham Road and Orchard Estate, for Mr. W. J. Brise; two houses, The Brent, for Mr. L. Fuller; bungalow, rear of Princes Road, for Mr. G. H. Giles.

The L.C.C. has arranged terms with the Government for relief schemes under which men from depressed areas will be engaged. The schemes are as follows: Stormwater pumping station at DEPTFORD, £230,000; improvement of the River Graveney at WANDSWORTH, £60,000; enlargement of Lots Road pumping station, £250,000; and concrete river wall at Wandsworth Park, £30,000.

Plans passed by the EAST HAM Corporation: Conversion of houses into shops, Barking Road, for Messrs. Le Bond, Ltd.; house, Byron Avenue, for Mr. E. Redbond; six houses, Market Street, for Mr. A. W. Jaggers; shop, Barking Road, for Mr. H. Joseph; two houses, Dersingham Avenue, for Mr. T. W. Bedford; factory, Church Road, for Mr. T. Anders; three houses, Bristol Road, for Mr. R. C. Turner Gordon; house, Capel Road, for Mr. R. C. Turner Gordon; six houses, Folkestone Road, for Messrs. Herepath Bros.; workshop and store, Napier Road, for Mr. E. Farr; alterations, 116 High Street, for Mr. L. B. Voisey; two shops, Plashet Grove, for Mr. J. W. Lohden; workshop and store, Little Ilford Lane, for Mr. F. Smith; alterations, Manor House, off-licence, Romford Road, for Mr. F. Smith; slaughter-house, Langdon Crescent, for Mr. B. Waddington; offices and committee rooms, 2 Kensington Avenue, for Messrs. Scriven and Huxtable.

The HACKNEY B.C. has acquired a site in Homerton Row for the erection of a block of between forty and fifty flats.

Plans passed by the HACKNEY B.C.: Building, Exmouth Place, for Commercial Motor Transport Co.; building, rear of 49-55 Paragon Road, for Mr. W. H. Chapman; additions to factory, 7-9 Belfast Road, for Messrs. F Dod and Co.; layout of site, rear of Downs Park Road, for Mr. A. G. Alexander; four shops, Ridley Road, for Mr. A.



Interior of the squash racquets court, Hook Heath, looking towards the gallery. Beyond the doorway is the entrance vestibule.

Tate; factory, Knightland Road, for Messrs. Burnett and Eprile.

Mr. R. F. Yeo has purchased sites on the L.C.C. Watling estate at HENDON, with frontages to Edgware Road, for the erection of shops.

The ISLINGTON B.C. is to borrow £69,000 for the erection of 113 tenements at Highcroft Road, Hornsey Lane; the buildings will comprise three five-story blocks, and will include some two-roomed flats.

Plans passed by the LAMBETH B.C.: Church and school, Acre Lane, for Messrs. T. E. Davidson, Son and Sherwood; additions, 143 Kennington Road, for Lambeth Endowed Charities; buildings, site of 74-84 Wandsworth Road, for Messrs. Trollope and Coles, Ltd.; buildings, rear 86 Wandsworth Road and Pascal Street, for Mr. F. M. Kirby; additions, 57 Westow Hill and Woodland Road, for Mr. E. C. Christmas.

In connection with the raising of the school age the L.C.C. Education Committee estimates that 5,000 new school places will be required, necessitating an expenditure on new school buildings of £500,000.

Plans passed at PURLEY: House, Hartley Old Road, for Mr. A. C. F. Luke; fifty-seven houses, Old Lodge Lane; fifty-two houses, Haydn Avenue, and six houses, Tennis Road, for Old Lodge Estates, Ltd.; house, Riddlesdown Road, for Mitchley Wood Estates, Ltd.; house, Hartley Old Road, for Messrs. Walter Cottage, Ltd.; house, Hartley Old Road, for Mr. F. A. Freeman.

Plans passed at SANDERSTEAD: House, The Ridgeway, for Mr. E. Wise; house, West Hill, for Mr. W. Cooper Jarvis; house, Borough Farm Estate, for Mr. David Bowerman; shop, St. Mary's Road, for Messrs. Chambers & Co.

The L.C.C. is to take steps to acquire a site of nine acres of land in Leigham Court Road, STREATHAM, for the erection of tenements.

SOUTHERN COUNTIES

The BRIGHTON Corporation is to allocate a further 100 acres of land on the East Brighton estate for housing developments.

The BRIGHTON Corporation has asked the borough engineer to prepare plans for the erection of fifty-six houses on the Whitehawk Valley site.

The BRIGHTON Corporation has obtained sanction to borrow £7,345 for the erection of a new maids' home at the borough sanatorium.

The BRIGHTON Education Committee has prepared plans for the erection of a new school on the Lewes Road school site, providing accommodation for 296 senior girls, 336 junior mixed, and 240 infant scholars, at an estimated cost of £29,000.

The BRIGHTON Corporation is seeking sanction to a loan of £272,000 for sea defence works between Black Rock and Rottingdean, the widening of the coast road from Roedean to Saltdean, and the construction of a new road from Roedean to Marine Parade.

Plans passed by the BRIGHTON Corporation: Fourteen houses, Milner Road, for Mr. Robert Fitzcosta; store and garages, Middle Road, Preston, for Messrs. Corrall & Co., Ltd.; seven shops, Hollingbury Place, for Mr. James Morley; extension, 15-16 Portland Place, for Kemp Town Brewery; alterations, 90 Western Road, for Mr. Simon Sirkin; alterations (revised plan), 17, 17A, 18 and 19 North Street, for Messrs. Hanningtons, Ltd.; rebuilding, 188-191 Western Road, for Mr. W. J. Wade; alterations, 68 Middle Street, for Messrs. Wiggs and Sons, Ltd.; canopy, "White Lion Hotel," Queen's Road, for Trust House Ltd.; two houses and two shops, Robertson and Hampstead Roads, for Mr. T. R. Braybon; house, Cranleigh Avenue, Rottingdean, for Mr. Joseph Baker; house, Grand Crescent, Roedean, for Miss A. E. J. Willett; alterations and additions, "Hotel Kittiwake," South Coast Road, Saltdean, for Mr. Arthur L. E. Carr; new operation department, Royal Sussex County Hospital, for the Committee of Management; additions, Hotel Metropole, King's Road, for Gordon Hotels, Ltd.; seven houses, Stanmer Villas, for Mr. C. Munday; operating box and alterations, "Grand Theatre," North Road, for Mr. Andrew Melville; additions, Throat and Ear Hospital, Church Street, for the Committee of Management; twenty-two flats, Ladysmith Road, for Mr. G. Ayling; parish hall, Ringmer Road, Moulsecoomb, for the parochial Church Council.

Plans passed by the PORTSMOUTH Corporation: Almshouses, Glasgow Road, for the trustees of Albert Cottages Almshouses; thirty houses, off Knowsley Road, Cosham, for Messrs. McCormick



Squash racquets court, Hook Heath, near Woking. Designed by O'Donoghue and Halfhide. The loggia (left) and the main entrance to the court (right). The building is of roughcast, with a brick plinth; the parapet wall has a tiled coping. Metal casement windows have been fitted; the roof is covered with tiles. On the entrance front, elm weather-boarding has also been used. *For ground-floor plan see page 965.*

and Son; six houses, Compton Road, for Mr. J. McLaren; flats, Lennox Road, for Messrs. Quinton and Scammell; alterations and additions, 45 Farlington Road, for Mr. A. G. A. King; alterations to bakery, 24, 28 St. George's Square, and flats, Broad Street, for Messrs. Jno. Croad, Ltd.; house, The Havant Road, Cosham, for Mr. A. Croad; seven houses, Monckton Road, for Mr. C. Brittan; garages, Brading Avenue, for Messrs. G. J. Davis and Sons; warehouse, Commercial Road, for Mr. T. H. Whittaker; eleven houses, Compton Road, for Mr. A. Le Santo; six houses, Money Fields Avenue and Sidmouth Road, for Mr. R. J. Winnicott; heating chamber, St. Joseph's Church, Tangier Road, for Messrs. Marchetti, Ltd.; twelve houses, Monckton Road, for Mr. S. Brittan; four houses, Kirby Road, for Mr. T. Ogden; store, Garden Lane, for Mr. J. Fifield; extensions to factory, Landport Street, for Mr. C. H. Reynolds; house and shop, Torrington Road, for Mr. H. Williams; dairy depot, Milton Road, for Portsea Island Mutual Co-operative Society, Ltd.; twelve houses, with shop premises, London Road, for Mr A. Kemp; store, 169 Lower Derby Road, for Mr. S. Fogarty; additions, Salvation Army Hall, Powerscourt Road, for Mrs. A. Hughes; additions, 43 Eastern Parade, for Messrs. G. J. Davis and Son; ten houses, Madeira Road, for Messrs. Brown and Fuller; offices, London Road, for Messrs. A. and E. Sprigings; house and shop, The Havant Road, Cosham, for Mr. H. Soar; nine shops, Copnor Road, for Messrs. Tanner Bros.; three houses, Sidmouth Road, for Mr. R. J. Winnicott; shop, Fratton Road, for Portsea Island Mutual Co-operative Society, Ltd.

SOUTH-WESTERN COUNTIES

The BRISTOL Corporation Housing Committee has decided to purchase thirty-one acres of land adjoining the Horfield Estate.

The BRISTOL Corporation is to carry out the following two works at Avonmouth Docks: Filling in portion of Broad Pill and raising level of the surrounding grounds, £18,000; construction of cart road along the Severn embankment, commencing at the north end of the oil basin Royal Edward Dock, and extending along the embankment to Holesmouth, £6,000.

The PLYMOUTH Corporation recommends the layout of Central Park.

Plans passed by the TORQUAY Corporation: Bungalow, Warberry Vale Estate, for Mr. W. H. Taylor; house, St. Katherine's Estate, for Mr. R. E. Narracott; bungalow, Devon Rosery Estate, for Mr. R. J. Williams; two houses, Barton Road, Devon Rosery Estate, for Messrs. R. F. Yeo and Sons; four houses, Leys Road, Chelston, for the Chelston Building Co.; three shops, Hampton Estate, for Mr. J. U. Harris; two houses, Newton Road, for Messrs. Bouttens and Son; two bungalows, Happaway Road, for Messrs. Thumpston and Jones; house, Lincombe Drive, for Mrs. G. A. Norris; bungalow, Wynn Estate, Maidencombe, for Mr. Williams; four houses, Westhill Road, for Mr. F. Maule; shop and house, Cadewell Lane, for Mr. F. E. Wilson.

MIDLAND COUNTIES

The BURTON-ON-TRENT Corporation has passed plans submitted by the borough engineer for the erection of thirty-four houses on the Gordon Street site.

The COVENTRY Corporation is seeking powers to acquire land at Exhall for the erection of a mental hospital.

The COVENTRY Corporation is seeking powers for the following works: new street, Highfield Road to Swan Lane; widenings of Ironmonger Row and Cross Cheaping, Well Street and Hearsall Lane and Spon End; a new street, including a bridge over the Coventry Canal, from Red Lane to Swan Lane; widenings of Church Lane, Stoke, and Binley Road; a bye-pass road from the main road from Coventry to Birmingham in the parish of Allesley, through the city and parishes of Stoneleigh, Stivichall, Baginton and Willenhall to the main road from Coventry to London; and a straightening and improvement of the River Sherbourne.

At a meeting of the Stoke-on-Trent Corporation Housing Committee, the city engineer was asked to report as to the desirability or otherwise of erecting houses on reinforced concrete rafts on a thirty-one acre site at GOLDENHILL.

The Stoke-on-Trent Education Committee has obtained sanction to borrow £29,000 in connection with the erection and equipment of Station Road council school, MEIR.

The STOKE-ON-TRENT Education Committee has obtained sanction to borrow £13,810 towards the cost of extensions to the North Staffordshire technical college.

NORTHERN COUNTIES

The BRADFORD city architect has prepared plans for the erection of seventy-eight tenements on the White Abbey area.

The BRADFORD Education Committee has decided to prepare plans for extensions at Barkerend Girls' and Primary School.

The BRADFORD Education Committee is to acquire a site at Thornton for the erection of an infants' school.

The CHESTERFIELD Corporation is to inspect sites for the erection of further houses at New Whittington and St. Augustine's.

The CHESTERFIELD Education Committee has asked Messrs. Wilcockson and Cutts, architects, to prepare draft plans for a boys' modern school at Boythorpe; the completion of the conversion of Highfield Hall; additions to Derby Road schools, Brushes school, and central and Old Road schools.

Plans passed by the CHESTERFIELD Corporation: Alterations, 35 and 37 Holywell Street, for Mr. G. Hoare; alterations to business premises, New Beetwell Street, for Messrs. Broomhead Bros.; alterations to business premises, West Bars, for Messrs. S. Goodwin and Sons; layout of land, Chatsworth Road, for Mr. W. Hancock; three houses, Storrs' Road, for Messrs. Jas. Collis and Sons, Ltd.; extensions, "Devonshire Arms," Hasland, for Messrs. Ind Coope and Co., Ltd.; house, Brookside, Chatsworth Road, for Miss Walker; extension to machine shop, etc., Sheepbridge Works, for Sheepbridge Stoke Castings Co., Ltd.; workshop and office, New Beetwell Street, for Messrs. E. and H. Jackson.

The LEEDS Corporation is to erect a further sixteen houses on the Meanwood Housing estate.

Plans passed by the MANCHESTER Corporation: Alterations and additions, "Travellers' Call" Inn, Hyde Road and St. Ann Street, West Gorton; alterations and additions, Lido Cinema and bank premises, Kingsway, Burnage; bank, Hyde Road and Chatsworth Road, Gorton; two shops and houses, Barlow Moor Road, Chorlton-cum-Hardy; six houses, Manley Road, Whalley Range; ten houses, Kingsway, Didsbury; ten houses, Parr's Wood Avenue, East Didsbury; shop and four houses, Parr's Wood Road and School Lane, Withington; 638 houses, Maitland Avenue and Chorlton extension housing estate for the Corporation; cinema and café, Withington Road and Dudley Road, Whalley Range; printing works, Waterloo Road and Allison Street, Cheetham; extensions to offices, Clayton Lane, Clayton; ten houses, Parr's Wood Avenue, Didsbury; vicarage, Balmain Avenue, Gorton; five houses, Manley Road, Whalley Range; ten houses, Kingsway Didsbury.

The RIPON Corporation Health Committee is to prepare a scheme for providing alternative accommodation to enable the re-conditioning or rebuilding of slum dwellings.

The RIPON Corporation has agreed upon the erection of a further forty-four houses on the Aismunderby Estate.

The ROTHERHAM Corporation Housing Committee has decided to invite tenders for the erection of 440 houses on the Herringthorpe Estate.

The ROTHERHAM Corporation Housing Committee has approved plans and estimates for the erection of sixteen non-parlour houses on the Herringthorpe Estate.

Plans passed by the ROTHERHAM Corporation: Building, Effingham Memorial Works, Effingham Street, for Messrs. Clarkson and Son; acetylene gas plant house, Wortley Road, for Messrs. Robert Jenkins & Co., Ltd.; twelve houses, Wickersley Road, for Mr. Garvin Bilton; building, Frederick Street, for Mr. T. W. Smith; shop, High Street and College Street, for Montague Burton, Ltd.

The SHEFFIELD Corporation has authorised the city architect to proceed with the erection of a further twenty parlour-type houses on the Ridgeway Road estate.

Plans passed by the SHEFFIELD Corporation: Fourteen houses, West Quadrant and Hucklow Roads, for the Church Army Housing, Ltd.; fourteen houses, Chesterfield Road, for Douglas Haig Memorial Homes; two houses, Abbeydale Road, for Mr. E. Savil; six houses, Roxton Road, for Mr. J. Marsh; three houses, Pingle Avenue, for Mr. T. H. Bailey; two houses, Folds Lane, for Mr. Harold Stevens; two houses, Dixon Road, for Mr. Simpson; two houses, Herries Road, for Mr. J. Maxfield.

Plans passed by the STRETFORD U.D.C.: Fourteen houses, Westwood Road, for Messrs. Howard and Waring; eight houses, Ruskin Road and Seymour Grove, for Messrs. Smith and Allcock, Ltd.; nine houses, Stothard and Manor Roads, for Messrs. H. Hampson and Son; extension of dychouse, Textilose Road, for English Textilose Manufacturing Co., Ltd.; mixing-room, Ayres Road, for International Wafer Co.; pickling shed, Westinghouse Road, for Metro-Vickers Electrical Co., Ltd.; alterations to cooperage, etc., Westinghouse Road, for Southern Oil Co., Ltd.; alterations to warehouse, Third Avenue, for Trafford Park Estates, Ltd.; brass foundry and garage, Trafford Park Road, for Messrs. Royce, Ltd.; alterations and additions, Boundary House, for Mr. F. Armstrong; extension, Northleigh Social Club, Seymour Grove, for Manchester Brewery Co., Ltd.

Plans passed by the YORK Corporation: Additions, 12 Church Street, for Messrs. Hart and Porter; additions, Winterscale Street, for Mr. W. S. Butler; two houses, Heworth Hall Drive, for Messrs. T. and M. Caffrey; four houses, Cornborough Avenue, for Mr. J. Dowling; four houses, Kilburn Road, for Messrs. Harrowell and Agar; new premises, Balfour Street, for the Leeman Road W.M. Club; alterations, 83 Walmgate, for York Equitable Industrial Soc., Ltd.; new depot, Castle Mills Wharf, for Shell-Mex, Ltd.; new street, Heworth Hall estate, for Mr. A. Temple; additions, "Elephant and Castle," Skeldergate, for John Smith's Tadcaster Brewery Co.; amended plan of alterations, Parliament Street, for Messrs. Marks and Spencer; two houses, Millfield Road, for Mr. T. Harrison; eight houses, Manor Drive, for Mr. J. Sawdon; new street and layout, Earswick, for Mr. T. C. Horner; two houses, Muncaster House estate, for Mr. Denby Collins.

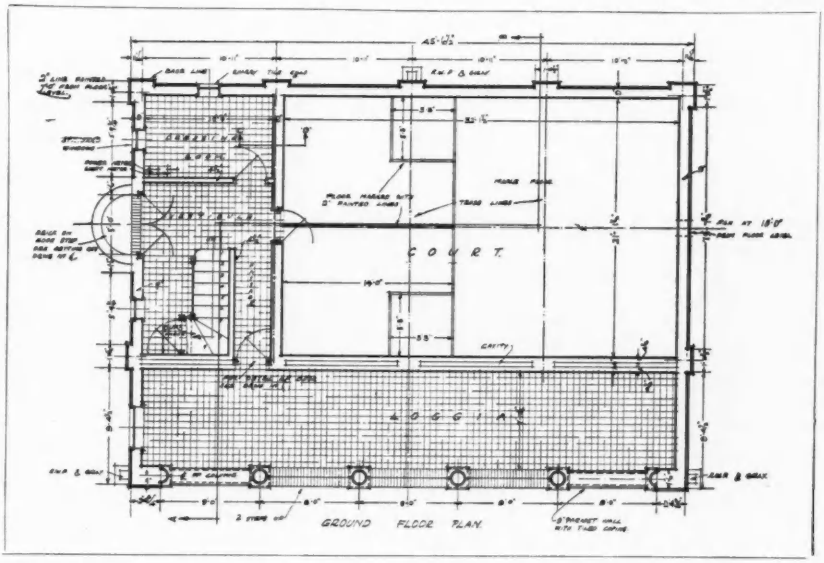
SCOTLAND

The GLASGOW Education Committee is to erect an elementary school and janitor's house at Springfield Road.

Messrs. G. and J. Weir, Ltd., Cathcart, are to extend their administrative block of buildings at Cathcart, GLASGOW.

Messrs. Alexander M'Lellan, Ltd., are to erect terraced houses in Auldhouse Road and Holeburn Road, Newlands, GLASGOW.

The GLASGOW Corporation has asked a committee to report as to the advisability of erecting winter gardens and a modern bandstand in Elder Park.



Squash racquets court, Hook Heath, near Woking. Designed by O'Donoghue and Halfhide. Ground-floor plan. Above the dressing-room and vestibule is a gallery overlooking the court.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_2	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead ..	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_2	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury ..	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster ..	Yorkshire	1 7½	1 2½
B	Dorchester ..	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich ..	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_1	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A	Luton ..	E. Counties	1 6½	1-2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton ..	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teesside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1*s.* 4*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* NAVVY, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

	£	s.	d.
Broken brick or stone. 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0
Screened ballast or gravel, add 10 per cent. per yd.			
Clinker, breeze, etc., prices according to locality.			
Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.			
Transport hire per day:			
Cart and horse £1 3 0 *Trailer*	£0	15	0
3-ton motor lorry 3 15 0 *Steam roller*	4	5	0
Steam lorry, 5-ton 4 0 0 *Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
If left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	16	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* BRICKLAYER, 1*s.* 9*d. per hour;* PLUMBER, 1*s.* 9*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	17	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1*s.* 9*d. per hour;* DO. *fixer,* 1*s.* 10*d. per hour;* LABOURER, 1*s.* 4*d.* per hour; SCAFFOLDER, 1*s.* 5*d. per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1*s.* 9*d. per hour;* TILER, 1*s.* 9*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles average per square	3	17	6
DO., machine-made do., per square	3	7	6

Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1*s.* 9*d. per hour;* JOINER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Timber, average prices at Docks, London Standard			
Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

⊠HUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅜ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅜ in., per ft.	0	0	6½
DO. *½ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up £0 3 0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. from 3d. to	0	0	6
Plaster-board, per yd. sup. from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. from	0	2	8
Asbestos sheeting, ⅛ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards. plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ½ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	⅜ in.			½ in.			⅝ in.			¾ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	6½	4½	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak												
1 side	8½	7	—	10	8	—	11½	—	—	1 8	—	—
Plain Oak												
1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE ARCHITECTS' DIARY

WEDNESDAY, DECEMBER 25 (CHRISTMAS DAY)

R.I.B.A., 9 Conduit Street, W.1. The Office and Library will be closed until Saturday, December 28.

THURSDAY, DECEMBER 26 (BOXING DAY)

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. General Tour. By L. O. Faraker. 12 noon. General Tour. By T. F. Wilson, F.R.S.A.I. 3 p.m. "English Furniture." By T. F. Wilson, F.R.S.A.I. 7 p.m. **12 noon**

FRIDAY, DECEMBER 27

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "French Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Chinese Porcelain. I." By L. O. Faraker. **12 noon**

SATURDAY, DECEMBER 28

Sunrise, 8.8 a.m. Sunset, 3.55 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Mogul Paintings." By T. F. Wilson, F.R.S.A.I. 3 p.m. "Chinese Porcelain. II." By L. O. Faraker. 12 noon. "Chinese Porcelain. III." By L. O. Faraker. **3 p.m.**

MONDAY, DECEMBER 30

R.I.B.A., 9 Conduit Street, W.1. First of three Christmas holiday lectures on Architecture for boys and girls. "English Architecture—How it Began." By the Hon. Humphrey Pakington, A.R.I.B.A. **3.30 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi. Dr. Mann's Juvenile Lecture. Admission by Special Ticket.

TUESDAY, DECEMBER 31

DAILY MAIL SCHOOL BOYS' EXHIBITION, Horticultural Halls, Westminster, S.W. To be opened by the Hon. Esmond Harmsworth at 10.30 a.m. The various exhibits will include working models of electric trains, motors and engines, as well as examples of work in various arts and crafts such as woodwork, pottery and metal work. Work in the engineering, building, printing, and other important trades will also be shown. **10.30 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Ironwork." 12 noon. "English Mediæval Sculpture," 3 p.m. Both lectures by T. F. Wilson, F.R.S.A.I. **12 noon**

WEDNESDAY, JANUARY 1, 1930

R.I.B.A., 9 Conduit Street, W.1. Second of three Christmas holiday lectures for boys and girls. "English Architecture—How it Grew." By the Hon. Humphrey Pakington, A.R.I.B.A. **3.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Metalwork." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, JANUARY 2

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Sculpture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

FRIDAY, JANUARY 3

R.I.B.A., 9 Conduit Street, W.1. Last of three Christmas holiday lectures for boys and girls. "English Architecture—What it Means." By the Hon. Humphrey Pakington, A.R.I.B.A. **3.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Far Eastern Pottery." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

SATURDAY, JANUARY 4

Sunrise, 8.6 a.m. Sunset, 4.4 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

MONDAY, JANUARY 6

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Modern Design and Decoration." By Howard Robertson, F.R.I.B.A., S.A.D.G. (Lantern Illustrations.) **7 p.m.**

SOCIETY FOR THE PROTECTION OF ANCIENT BUILDINGS AND THE NATIONAL TRUST. At the Royal Society of Arts, John Street, Adelphi, W.C. "Windmills in Holland." By Jan den Tex. (Lantern illustrations). Also "The Development of the Windmill." By R. Wailes. A. R. Powys will preside. **8 p.m.**

WEDNESDAY, JANUARY 8

R.I B.A., 9 Conduit Street, W.1. General Meeting. "Regional Planning with special reference to Greater London." By Dr. Raymond Unwin, F.R.I.B.A. Award of Prizes and Studentships. **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Regional Planning in S.W. Lancashire." By T. Pierson Frank, M.INST.C.E., F.S.I. **8 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1. "Observations on Flue Equipment, &c." By C. A. Masterman, B.A., A.I.C., M.S.C.I., M.S.I.E. **7 p.m.**

THURSDAY, JANUARY 9

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "The Work of the Building Research Station." By Dr. R. E. Stradling, D.SC., PH.D. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C. 2. Ordinary Meeting. **6 p.m.**

THURSDAY, JANUARY 9

INSTITUTION OF ELECTRICAL ENGINEERS. Dundee Sub-Centre. At the University College, Dundee. "Lubrication." By G. H. Chalmers. **7.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W. 1. "Engineering Contracts, some legal problems affecting Structural Engineers." By E. J. Limner, M.ENG., A.M.INST.C.E. **6.30 p.m.**

SATURDAY, JANUARY 11

Sunrise, 8.3 a.m. Sunset, 4.13 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C. 1. First of Series of Six Non-Technical Lectures on Present Day Architecture. "Architecture in Daily Life." By Howard Robertson, F.R.I.B.A., S.A.D.G. **3 p.m.**

MONDAY, JANUARY 13

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Western Centre. Annual Dinner (at Cardiff).

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, S.E. 1. Paper on "Oil versus Solid Fuels." By N. A. Seabeater. Light refreshments at 6.30 p.m. **7 p.m.**

TUESDAY, JANUARY 14

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the North British Station Hotel, Edinburgh. "The Heating of Buildings electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. **7 p.m.**

THURSDAY, JANUARY 16

INSTITUTION OF ELECTRICAL ENGINEERS. Hampshire Sub-Centre. At University College, Southampton. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt. Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. **7.30 p.m.**

FRIDAY, JANUARY 17

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Smoking Concert to be held at Carr's Restaurant, 264 Strand, W.C. Tickets may be obtained from the Secretary.

SATURDAY, JANUARY 18

Sunrise, 7.57 a.m. Sunset, 4.24 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C. 1. Visit to Tower Bridge. Meet at Superintending Engineers' Office, Tower Bridge, at 2.30 p.m. **2.30 p.m.**

MONDAY, JANUARY 20

R.I.B.A., 9 Conduit Street, W. 1. General Meeting. President's Address to Students. Criticism by Louis de Soissons, O.B.E., F.R.I.B.A., on work submitted for Prizes and Studentships. Presentation of Prizes. **8.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. South Midland Centre. At the University, Edmund Street, Birmingham. "Voltage Control of Large Alternators." By H. W. Taylor. **7 p.m.**

TUESDAY, JANUARY 21

INSTITUTION OF ELECTRICAL ENGINEERS. East Midland Sub-Centre. At the College, Loughborough. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched-Arc Switch." **6.45 p.m.**

WEDNESDAY, JANUARY 22

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper on "Architectural Lighting." By R. W. Maitland. **8 p.m.**

THURSDAY, JANUARY 23

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C. 1. At Birmingham. Paper on "Modern Improvements in Resistance Welding Machines." By C. A. Hadley.

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W. 1. "Setting out and erection of Multiple Story Buildings." Informal Discussion. By G. F. C. Caswell. **6.30 p.m**

SATURDAY, JANUARY 25

Sunrise, 7.50 a.m. Sunset, 4.36 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C. 1. Second of Series of Six Non-Technical Lectures on Present Day Architecture. "The House You Want." By R. Randal Phillips, Hon. A.R.I.B.A. **3 p.m.**

MONDAY, JANUARY 27

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C. 1. "Some Aspects of Contemporary Continental Decoration." (Lantern Illustrations.) By J. M. Holmes. **8 p.m.**

As from January 1, 1930, The Architects' Diary will be found immediately preceding The Week's Building News—ED., A.J.



LONDON'S NEW TOWER OF MEMORY

The Tower of the William Booth Memorial Buildings at Denmark Hill, S.E., is now complete. It rises to a height of 200 ft. and is 35 ft. square.

The question of foundations was a serious one, as the Tower faces a railway embankment. After consultation with the London County Council and consideration of many schemes, it was eventually decided, owing to the treacherous nature of the clay subsoil, to sink them to a depth of about 40 ft. below the ground.

The memorial buildings were officially opened by Prince George on July 8 last, and fully illustrated in THE ARCHITECTS' JOURNAL *for July 10. They were built as a training college for cadets of the Salvation Army, and as a memorial to the founder of the Army, "General" William Booth. The associated architects were Messrs. Gordon and Viner and Sir Giles Gilbert Scott.*

THE ARCHITECTS' JOURNAL



WEDNESDAY, DECEMBER 25, 1929

THE TWENTY-FIFTH DAY OF DECEMBER

"Now is the Time of Christymas."

—OLD CAROL

IT will be noted that, by a coincidence of the calendar, this number of THE ARCHITECTS' JOURNAL is dated for the feast of Christmas Day.

Following the even tenor of our way, we are apt to pay but little heed to the ordained days of fasting or thanksgiving. Easter and Harvest pass by unrecognized, and if, at the New Year, we indulge in retrospective digression, or give wings to fond hopes of a brighter future, to do so arises rather from a state of physical and mental exhaustion than from any desire to salute the sun as he rises new-born from the ashes of yesteryear.

Editorially considered, the year is unending; the old overlapping the new, with no door to open suddenly, as presenting, in all the flush of new light, a new year. Yet this year, when the workings of Time bless us with all the dignity of Christmas, we may be moved to consider ourselves under an obligation to the festival that has made welcome the twenty-fifth day of December.

For, by common consent, we may think no ill on this day; on this day we may forget all things that trouble us; on this day we may do little but eat and drink and think well of ourselves, and consider how, after all, life is not as bad as it is apt to be painted on, let us say, the 27th of February.

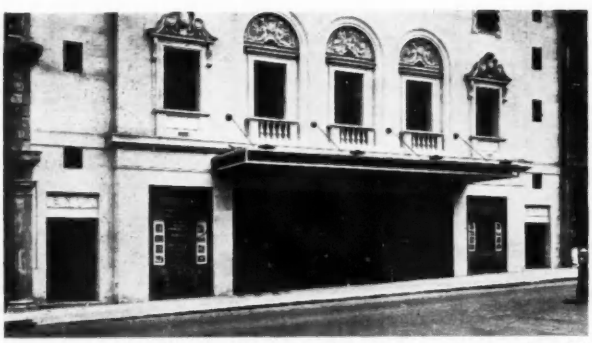
On this day there is freeman's licence. We may eat and drink, and lounge and think. We may blow the smoke of the unwonted cigar, and dream. Life is good. Life is fat and plenteous. Life will bring things to us anon, just as Father Christmas is bringing things to undeserving little boys and girls. We, luckier than they, clutch or yearn after less substantial things, which hover about us as we sit replete and happy in the evening of the day, appearing to us as even more desirable now than those shiny presents appeared to little boys and girls so soon after breakfast.

It is on Christmas Day really that we look forward; feel hopeful; count our blessings, before the income-tax has descended, and before we have returned to town to take up the threads of day-to-day existence. And perhaps there are many things which should be talked about here—important things and serious. As, who shall design our public buildings, or who will build Charing Cross Bridge, or will save England from the hand of the despoiler.

But we will not discuss them now, when all the blessed vacuum of Boxing Day lies before us. We will sit and dream that some genius of a man—a man after our own heart and very like ourselves—will win great blocks of Government buildings, and build them more beautifully than ever the race of man deserved. We will see through clouds of smoke the shining glory of a noble bridge, piercing the hearts of north and south, in a great Appian way of a road. And our minds will travel over the length and breadth of a new England from which all taint of vandalism has parted, being transformed by the magic of our benign Christmas-laden spirit.

And nothing for this day will disturb the blessedness of our peaceful soliloquy. We will wish all men well, removed as we are from the contact of anything that disturbs our happy contemplation.

Let us close the year, therefore, on this note of peace, wishing all those who read these gentle sighs the fulfilment of all their fondest wishes.





Entrance of the Carlton Theatre, Haymarket, S.W.1, as the architect designed it, and as it appears today.

NEWS & TOPICS

BUILDING LAWS AND RURAL BEAUTY

THE debate which Mr. Baillie Scott opened at the R.I.B.A. on Monday of last week became a very one-sided affair. The subject for debate—"Are Building By-Laws Destructive of Rural Beauty?"—seemed vaguely to promise an interesting discussion, but those who went hoping for new light on problems of rural architecture listened to a variety of expressions of opinion on the subject of the eight-foot ceiling and the regulations governing the size of windows—but little else. Mr. Baillie Scott was provocative enough, in his opening remarks, to set a whole room talking, but, as often happens when members turn up to a discussion without having given any previous thought to the subject of debate, only two salient points were seized upon, and these, for the rest of the evening, were bandied to and fro to the point of boredom.

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It does credit to our system of local government to realize that the meeting could not find itself in agreement with Mr. Baillie Scott, and thought that there were, if anything, too few by-laws, and most certainly a dearth of the kind of by-law that might concern itself with the use of fitting materials. When one reflects that hundreds of bungalows, built with insufficient stability and a total lack of adequate drainage, have been allowed under existing by-laws to be built upon land definitely scheduled as being liable to Thames flood, this view is considerably reinforced. One realizes, of course, that though it has been proved possible to build cottages with eight-foot high ceilings and large windows in every way as rural as their predecessors, no one has as yet touched the real problem of the farm labourer's cottage. Mr. Baillie Scott might have had that up his sleeve.

ENTER THE HUMANITIES AT LIVERPOOL

It must be considered as an indication of a new outlook on the possible sphere of useful life when a university widens its entrance examinations to include drawing design and architecture among the principal subjects of examination. Hitherto, Greek, Latin, and Higher Mathematics offered the only means of entry to Liverpool University, which now, by its approval of a scheme whereby the sons of poor parents may obtain an education in design and architecture, opens its doors in the widest sense to the Humanities. The presence of the schools of architecture and civic art within the body of the university probably accounts for this most excellent departure from time-honoured precedent.

BEFORE AND AFTER

Although those financially interested in the cinema industry are supposed to set great store upon good architecture as a means of influencing the public, and swell with pride in their present rôle as patrons of the mistress art, this is the sort of thing they do with architecture when they get it. Generally speaking, the cinema people in this country are no better than second-rate showmen, and don't deserve good work when they get it. How else could they have been induced to sink so much money in the silly atmospheric architecture they borrowed from Chicago; and who else would commit the Egyptian travesties one sees about, all in the name of high art? As an entrance to a show, I doubt if this poster façade could be better. I loved its colour when I saw it first, and found myself enjoying it hugely before I recollected what an impertinence it really was.

THE HEALTH-GIVING DOMESTIC CHIMNEY

Is the omission of the chimney and chimney-pot in the "all-electric" or "all-gas" house a serious menace to the health and even the lives of the inhabitants? This uncomfortable thought disturbs my mind after the receipt of two letters, one from Sir Lawrence Weaver, and the other from a stove-maker. Sir Lawrence does not desire to dispute the virtue of electricity as a heating agent which does not produce fumes, but he does very much doubt the wisdom of assuming that, for the whole period of the life of "all-electric" houses, the substitution of an open-grid ventilator for the domestic chimney will suffice. The omission of the domestic chimney without replacement by flues of reasonable dimensions presupposes that the grid ventilator will always function adequately and never be subject to accidental or deliberate obstruction. But this assumption, he points out, is not borne out by experience, and even if it were, it is the wildest optimism to suggest that a grid can take the place of a chimney as an agent for the proper and constant change of the air in a room. He has lived in a room without a chimney and with electric heating, and suffered in health accordingly. He is now responsible for building some 250 houses, and has made it the first and unbreakable rule that at least three out of four rooms, whether living-rooms or bedrooms, shall have a chimney, whatever form of heating may occupy the hearth.

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The letter of the stove-maker concerns the "all-gas" house and is in similar vein. He views with alarm the growing tendency on the part of builders of small houses to reduce the size of gas flues, to cause the flues to terminate perhaps in air bricks on an outside wall against

which a wind will blow, or to terminate them under the slates of the house, and thinks it a mistake to abolish the chimney-pot. In the case of a house where the occupants complained of fumes coming from the next house, he was of opinion that the cause of the trouble was a broken gas flue through which the carbon monoxide from the sitting-room of the one house was being sucked with natural down-draught down the disused gas flue of the next house. Had the chimneys been constructed as they used to be, he points out, this could never have happened.

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The question has even a legal aspect. Having recently purchased a house from a builder, a householder of my acquaintance decided to remove the gas fire from the sitting-room, to replace it by a coal fire for use during the winter, and to reinstate the gas fire in the spring. He communicated with the gas company who, upon investigation, told him that the gas stove was connected with a gas flue and that it would be impossible for him to make the change. He is now consulting his solicitor as to whether he can force the builder, from whom he purchased the house, to construct a chimney.

NEW MATERIALS

We have only to look about us to know that invention and adaptability have been as fertile in the field of building as in other departments of business. Consider, only, the varieties of glass available for decorative, and even structural, use today. But by the same portents we may know that much of the ingenuity has proved itself a vain expense of time and money, for some of the synthetic materials which inventors and manufacturers have pressed upon us in place of those which have stood the test of time, are both ugly and worthless. Others we know to be good; and many have come to stay, and must be added forthwith to the body of tried and trusted friends. Actually, there are today seventy-five per cent. more men engaged in the making of new materials than in 1923.

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Here I cannot refrain from referring to the work of the Building Research Board, which has until recently carried on its work quietly and comparatively unnoticed, though latterly it has established a much clearer contact with industry and building. Had it been able to experiment upon many of the materials which have sprung up with such rapidity to replace expensive bricks and stones, a great deal of time and much money might have been saved to the nation. Instead of which we have carried on by hit-and-miss methods—and there is no architect but has a most lively recollection of the devastating misses.

THE DECAY OF BUILDING STONES

That much indeed has yet to be learnt about building materials from chemical, physical, and sometimes biological aspects, will be readily admitted by anyone who studies the deterioration of structures, and the designer taking advantage of all that science can tell him is yet often left in doubt as to the best material for a specific purpose. Choice frequently rests largely on the matter of environment. I read that a life-size statue in Nottingham, the work of a leading sculptor, executed only eighteen years ago, is falling into irreparable ruin through the effects of weather. That this should happen in the comparatively innocuous atmosphere of this city is a striking proof of the above assertion. Fortunately this subject is receiving very considerable attention from the Chemical and Weatherings Committee which has recently been advising on the repairs to the Houses of Parliament, while research work has now reached a stage at which some fairly definite opinion upon the behaviour of any stone in a given situation may be predicted with some measure of confidence. Statues, of course, present special contour problems, but generally it may be said that the best means of preservation is to avoid lodgments for water and dirt and to wash the work with water at regular short intervals.

DERELICT PROPERTY

I hear that the St. Pancras Borough Council Housing Committee has taken steps to get the question of derelict property definitely settled. At a recent meeting it was pointed out that no legal powers exist under which a local authority can enforce the putting of such property into habitable condition, neither can it take over premises the owners of which are unknown. The Council has communicated with the Minister of Health, suggesting that he should consider introducing legislation to empower local authorities to take over and manage derelict houses where owners have refused or failed to put them into habitable repair. The owners' neglect is, I feel, an attitude to be condemned, especially as, at the present moment, housing accommodation is so badly required. The St. Pancras Borough Council have, unquestionably, an axe to grind in that they have many derelict houses, but, nevertheless, they have raised a question which is of vital importance.

THE CALTON JAIL SITE

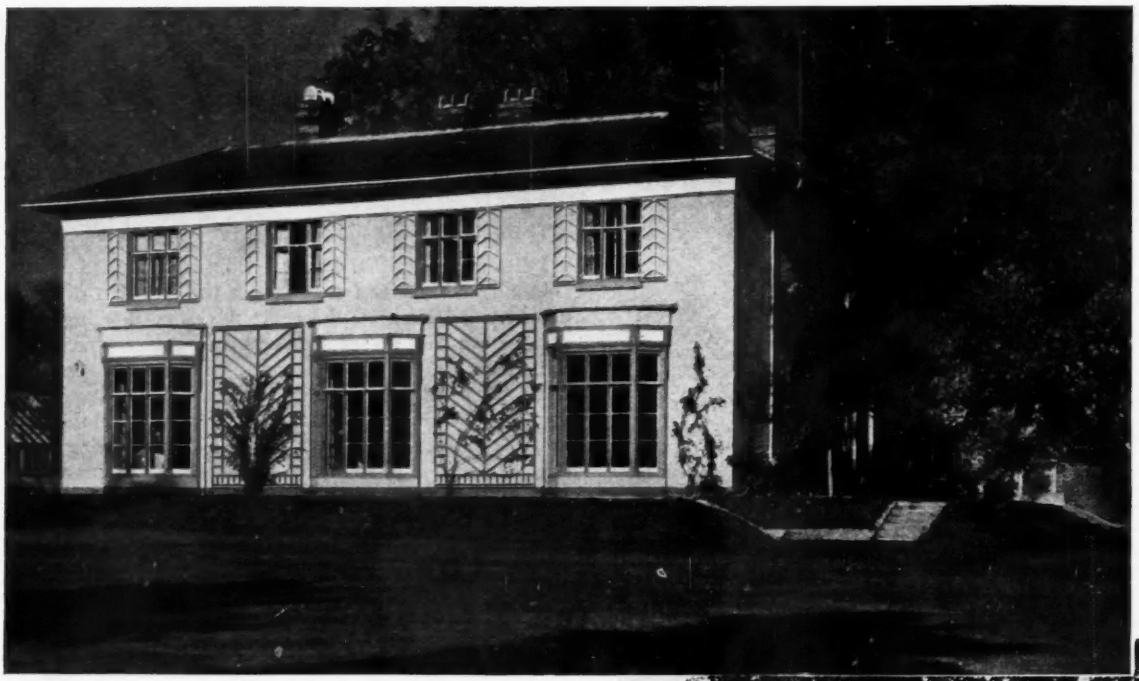
Mr. George Lansbury, M.P., First Commissioner of Works, has definitely refused to consider the holding of an open competition for designs for the new Government buildings to be erected on the Calton Jail site. To a joint deputation of the Edinburgh Town Council and the Sheriff Court House Commissions, which he received in Edinburgh, he explained that the buildings were being designed by Sir Richard Allison, the chief architect of the Office of Works. The design and elevation would go to the Fine Arts Commission for Scotland and thereafter to the Edinburgh Corporation. Speaking for himself, he would not dream of proceeding in the face of really serious opposition if the objection raised to the scheme appeared to be of sufficient weight to justify him in reconsidering the decision. I understand that at the moment the opposition in Scotland alone includes 10,000 active members of architectural and other societies. It also includes the Edinburgh Corporation, to whom finally the design is to be submitted.

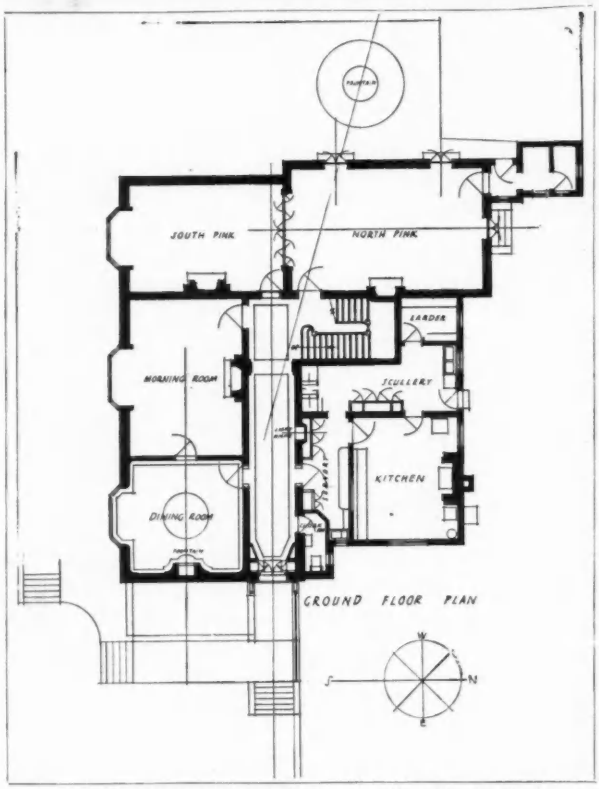
WIDENING PUTNEY BRIDGE

Putney Bridge, which carries an enormous load of traffic for so narrow a width, is to be widened from 44 feet to 74 feet between parapets. The approaches were congested as long ago as 1914, when a scheme of widening that had been approved by the L.C.C. was held up by the war. Today the congestion is chronic, for the bridge carries one of the great exit roads through Wimbledon to the South. It is interesting to compare the estimate of £230,000 for the 1914 scheme with that of today's £433,000 for an identical scheme. ASTRAGAL

A SYMPHONY IN GLASS

DECORATIONS AT "*FINELLA*" BY RAYMOND McGRATH





On a scale of approximately $\frac{1}{8}$ in. = 3 ft., this sketch shows how cunningly placed is the fountain, to afford vistas and a reflection (see page 978).



Views of the Victorian house (below) *which has become "Finella"* (above).

AT "Finella"[1] is seen the rehabilitation, by virtue of modern materials, of a colourless Victorian house. Fretted overmantels, dark panelling, ribbed ceilings, curly brackets, leadlights, and florid dust-collecting cornices have been superseded by smooth glass architraves, simple reflecting surfaces, rectilinear cornices with no horizontal ledges, and hygienic coved floors. Unstinted, but at the same time ordered, use of colour has been made because of the obvious qualities colour has to soothe or exhilarate—two qualities invaluable in the right places. The originally damp house has been dried by the Knapen anti-damp system of syphons (described elsewhere in this issue—Ed. A. J.), and Knapen aeration goes hand in hand with the central heating. The electric light has been made to shine up from below to illuminate the reflecting surfaces above and to soften from a new angle the simple archi-

[1] "Finella" was a legendary Queen of Scotland to whom the honour of discovering glass was attributed. This and her other achievements, which include throwing herself down a waterfall, caused her to be selected as the theme of this house, in which glass and water are used as decorative elements.

tectural forms. Power has been used for heating, cleaning, polishing and washing.

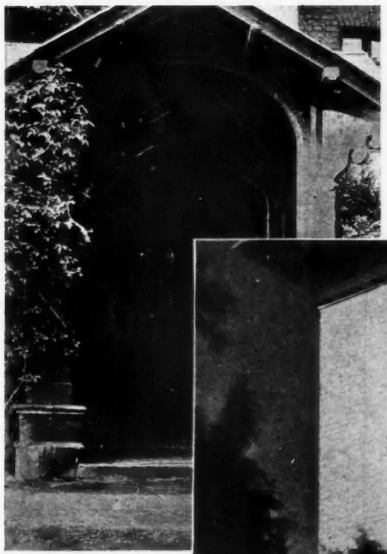
The exterior façades are crowned with a deep cornice which, like one great continuous lintel, binds together the heads of the upper windows. The eaves are wide and boxed in simple flat panels. Geometrical trellises have been applied to the garden-front. The chevron patterns of these are continued by the eye as diagonals which intersect and so bind together in an organic way the principal features of the façade. Rose-pink and lemon, greens and yellows, with touches of brighter yellow, are used on the exteriors. These colours find a reflection in the surrounding garden and trees.

A long straight path and two flights of steps lead up to the small terrace, on which stands a shallow entrance porch. On its right the terrace platform is fenced with low yellow wrought-iron railings in two bays, a lower and a higher, linked together with large volute scrolls.

The porch itself is of wood, painted green, with its inside surfaces yellow, just as green leaves often have a yellower underside, or flowers a brighter inside cup. The long side panels of the porch are of Georgian wired glass. Three glass panels above throw down a light over the pavement. The porch has a triple crest of beaten copper trumpet-shaped finials. The entrance doors are steel-framed,



The front entrance, as seen from outside, by night. The method of indirect illumination is described in the text.



The entrance doorway, before rehabilitation.

"Finella," Cambridge.]

[By Raymond McGrath.



As it is today, the entrance has balusters, with volutes, to its two short flights of steps; and the porch carries three trumpet-shaped copper finials.

cellulose painted, with panels of polished Georgian wired plate glass, embedded with a network of nickelled wire. There are no kicking panels to impede the openness of the hall. The effect is of a lightly netted, entire glass doorway giving on to the garden and allowing a maximum illumination of the interior.

In the immediate entrance of the hall there are splayed cloak cupboards which unite in a semi-octagonal pointed arch above the doorway. In these fixtures there are also two radiator recesses fitted with copper Plymax doors, over which, one either side, are set jade baskets full of illuminated glass fruit and flowers.

The hall, 40 ft. long and 7 ft. wide, has a mansard ceiling of silvered, ribbed cast glass in 2-ft. panels. This glass has a jade green colour and a rippled texture. The far-end bay into which the staircase gives is roofed with a four-part elliptical vault, silver-leafed, which is divided from the hall proper by a pointed arch, springing, via banded chromium metal caps containing lights, from pilasters of cast sheet glass, the impurities in the substance of which give them a rich sea-green colour. The walls of this bay are sheeted with lemon-gold mirrors, and doors and woodwork are in lavender cellulose. These mirrors increase optically the length of the hall, and the axial doorway, in its surround of gold mirror, appears to float magically in the air with the fierce head of "Finella" suspended over it.

The walls of the hall are silver leaf, sprayed with a transparent aquamarine green lacquer. There is a cornice ledge of fluted gold glass, hiding the structural framework of the ceiling, which runs on dentils of clear polished plate. Over the dining-room and servery doors, which give on to the hall, there are keystones of glass, serving a purely decorative function. The hall floor is black Induroleum composition, with a coved border of blue, separated from the central strip by a line of gold glass mosaic. At the entrance end of the hall a harpist and four dons are inlaid. At the opposite end, beneath the vault, is the double-sceptred serpent from the Pictavian stones.

The hall is particularized by its night lighting. The threshold of the axial door is a panel of ground-glass, and there are similar light traps in the thresholds of the other doors. The light wells up from these sources, flooding the jambs of the doors, and illuminating the ceiling with a softened, reflected light. The bottom internal lighting of the pilasters gives out a marine gleam. The effect is mysterious, and also soothing and satisfying. No picture could hang in this hall and none was intended. Instead, there is a kind of niche-alcove, at eye-level in the wall, a burnished gilt recess in which a glass palm-tree and a brass figure, standing on a brilliantly-lit floor of glass, form one of many intriguing miniature sets.

The staircase well is 23 ft. high, roofed with a velarium of yellow oiled-silk, which diffuses the sunlight by day and the lamplight by night. This velarium hangs tent-wise from its ridge to a bronzed cornice. The staircase walls are silver. The stair balustrade is an unbroken surface of copper. Newels and rails are in lavender cellulose. The stair-treads are maroon rubber, with a border of lemon-chrome yellow. The lower newel is capped with a bronze flute-player, those on the landing are capped with sea-horses.

Rising above the half landing, on the end wall of the aircase, there is a long niche with a gold frame. This



Comparison of this view, from inside the hall, looking towards the old front doors, with that below, gives perhaps the most striking instance here offered of the change wrought by adaptation with the aid of ultra-modern materials, in which - glass figures extensively.

"Finella," Cambridge.]

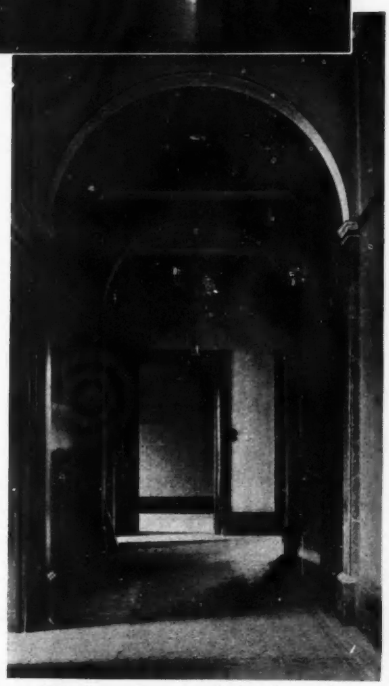


The new front doors are steel-framed, without kicking-plates, are cellulose finished, and have panels of polished Georgian wired plate-glass.



The inner end of the entrance hall, showing, illuminated, the pilasters of iron-green glass, and glass threshold of the door, above which looks out the mask of the presiding "Finella." To the right a glimpse is seen, through two door-spaces, of the fountain, also illuminated.

[*By Raymond McGrath.*



The bare elements of the above view, before transmutation.

is glazed with thick glass, behind which flowers appear as if embedded in ice. Over the niche there is arranged a decorative group of a Buddha standing on a silver ball which is supported by flying dragons. The halo of the Buddha is of clear glass, illuminated so that the bevelled edge of the disc catches the light in a sharp and definite circle above his head. At the head of the stair the landing is sheeted with black highly-polished glass, which reflects the velarium and haloed Buddha darkly as in another world.

The dining-room is the most formal room in the house. Its colour scheme is pink, black and silver, with touches of blue and green. The floor is Plevna pink Induroleum, with a black wheel-pattern distributing Pictavian motifs, like a zodiac. In the ceiling there is a shallow cast glass dome, 6 ft. in diameter, surrounded by a ring of Orrefors glass stars. This dome is engraved with the architect's own naïf designs, and is silvered on its convex side, so that its concavity reflects the silver wall, the pink floor and the green lawn through the window outside, frostily, in a rainbow sequence.

In the centre of one wall there is a niche of black and fluted silver glass, in which stands a white-glass trumpet vase, 6 ft. tall, blown by the Whitefriars glass works. This is the central feature of the fountain for which the niche was designed, a fountain in which the colour of falling water is illuminated against the rich black of glass. Below the niche is placed a Tricity louvred copper radiator of 2,000 watts. On the wall opposite there is a panel of ribbed glass in a black glass frame. This is painted with a silhouette of Finella leaping over the waterfall, and is lit from below. The dining-room flush door has an architrave of plate glass bedded on green velvet. The service to this dining-room is directly across the hall from the servery. When the rest of the hall is in darkness, the floor lights guide the maid's footsteps discreetly to the dining table. Furniture of metal and glass has been designed for this room.

The morning-room has glossy walls of a green primrose yellow, with darker daffodil-yellow radiators and woodwork. There are two small wheel-engraved Orrefors white glass wall-lights on oxidized-silver brackets. The doors are faced with gaboon plywood, the fine grain and natural colour of which is brought out with transparent cellulose.

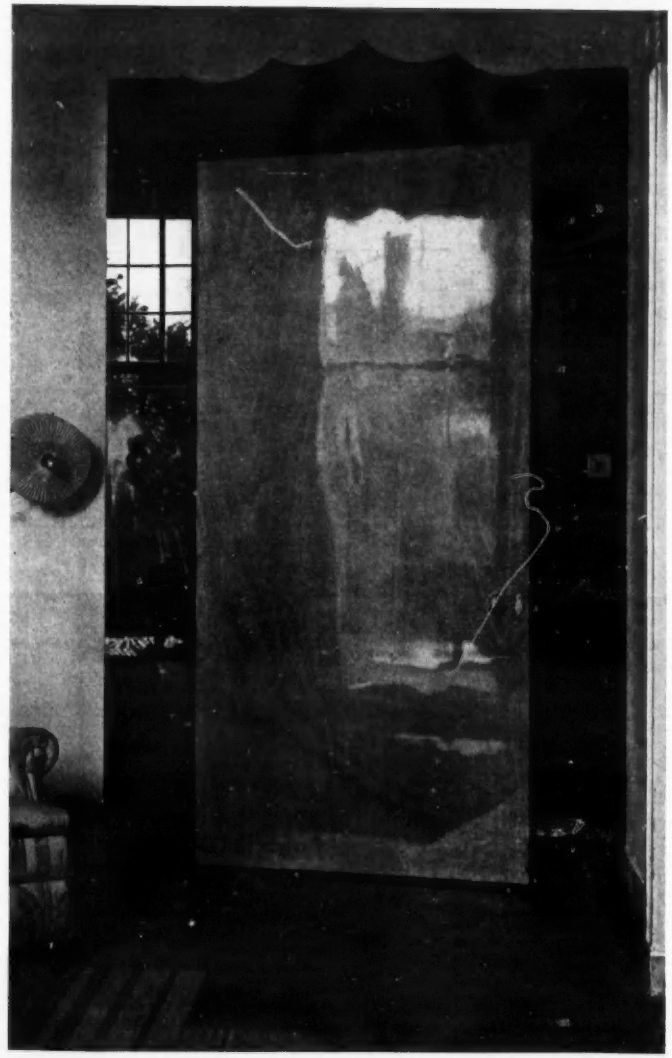
The twin living-rooms of the house are sprayed with warm shades of shell-pinks, the north room a warmer shade than the south, and the ceilings of each a slightly cooler shade of pink than that of the walls. These rooms are connected by folding lacquered-copper doors set in a silver frame. The doors are hung in eight flush leaves, and have black nickel-plated waved brass handles. The south room overlooks the garden with its presiding cedar. The larger north room has three tall steel-frame French windows, which rise almost to the ceiling, so that the light is reflected well into the room. Two of these windows open upon a small cobbled court, in which an almost Spanish fountain interlaces its eight sprays amongst plum and apple trees. These windows are left crisp and clean, uncurtained, but the end and axial window has a silvered baroque pelmet, a rich note on the otherwise simple wall, from which drape soft cream-white curtains of balloon fabric. The door which opens into the hall has a wide architrave of black glass reflecting, through the opposite window, the fountain playing amongst trees.



The garden fountain, Spanish in character, with its guardian griffin, which, although outside the house, may almost be said to be the dominant motive of the ground-floor treatment, so inevitably does it come into view as one moves about the house.



By night the value of the fountain as a decorative focal point is retained, at will, by artificial lighting.



This view illustrates the fountain's domination. In reality one is looking at the doorway in the south-east corner of the North Pink sitting-room; it is the griffin's reflection that one sees in the glass surround, and even, darkly, in the door itself.

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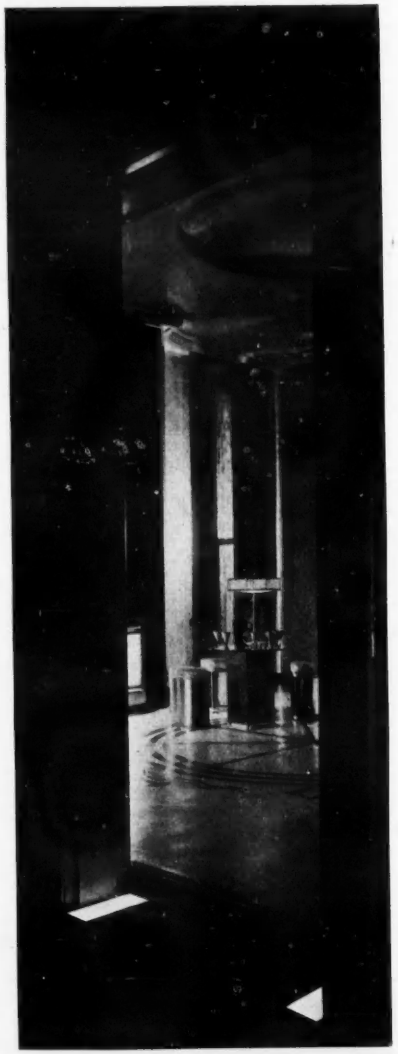


"*Finella,*" *Cambridge.*]

The North Pink sitting-room has folding doors to the garden. This is the view through them and the folding leaves dividing North and South Pinks.



Looking down on the dining-room from a point somewhere near the ceiling—a view taken to show the designs inlaid on the floor, black on a pink ground. At the skirting the border is of gold mosaic and black glass. The table itself is of glass.



[*By Raymond McGrath.*

A glimpse into the dining-room through the doorway from the hall. It has a slightly concave engraved glass dome in the centre of the ceiling.

Modern French furniture has been chosen for this room, and there are ornaments of Venetian glass and Venetian and Dresden mirrors on the walls, and these, like fragile cocktails, give a sparkle to the comfortable simplicity of these very livable rooms. In the two rooms there are four pictures—a Wadsworth, a Banting, a Marchand and a Duncan Grant.

The bedrooms and bathrooms are all on the first floor. Some of these bedrooms have been papered with the delightful modern papers that can now be got in Sweden and Germany. Two of these rooms have Orrefors chandeliers of white and blue translucent glass, perhaps the most beautiful glass yet manufactured for modern light-fittings. Whilst these fittings are delicately coloured, the light they diffuse is, nevertheless, almost untinted. The bathrooms have Induroleum floors and coloured, built-in Aptus baths, with composition risers. The west bathroom has a Plevna pink composition floor, an ivory skirting and border, a pale cochineal-pink bath with a surround of black glass, and Marmorite and silver-leafed walls, sprayed to a rainbow delicacy with transparent coloured lacquers, subsequently varnished to resist steam and moist conditions. The north bathroom has a black floor and a white bath in a surround of vermilion-red glass. The east bathroom has a cerulean blue floor, a powder-blue bath, and a glass surround to walls of apricot colour. The closets are fitted with Uni-Hygea disinfectors and all fittings, including the heated towel-rails, are chromium-plated.

The service arrangements are straightforward and efficient. In the kitchen there is a No. 2 Ideal Cookanheat stove with a subsidiary gas boiler for summer use. Kitchen and scullery have yacht-varnished cream walls and are fitted with flyproof doors and windows. In the scullery there are built-in aluminium Plymax cupboards, complete with let-down silver cleaning flap and other devices. There is a tradesman's hatch, which automatically provides empty compartments for deliveries, and finally locks itself. This is the Parcedor of the last Ideal Home Exhibition. The larder has a coved white composition floor, white enamelled walls, and shelves of thick plate glass.

There is a cloak-room giving on to the entrance hall, which is panelled with secretly-nailed aluminium sheets, so that no fixing is showing. The woodwork is entirely sleek ebony black. The window has a blue-glass sill. The ceiling is one single sheet of Georgian wired glass, silvered, so that it reflects indirectly the white light of the daylight lamp which is concealed in the metal Desny bowl over the wash-basin. This is a clean, fresh, metallic room, and the most modern, since all the materials involved in its construction were not available for use even two years ago.



"*Finella*," *Cambridge.*] [*By Raymond McGrath.*

Looking from the South Pink into the North Pink sitting-room. All the windows have French folding casements, looking out into the garden : the two on the left give on to the cobbled fountain court ; that in the far wall has a silvered baroque pelmet.



"Finella," Cambridge. [*By Raymond McGrath.*

The staircase, as seen from the half-landing. Above is a tent-shaped velarium of oiled silk, semi-transparent; the walls are finished in silver-leaf. Polished copper is used for the balustrade, and lavender cellulose to finish the handrail, newels and string, as well as the dado. The maroon rubber stair-treads and risers are bordered in Naples yellow. Brass sea-horses on black nickelled bases cap the newels.



On the half-landing is a flower-niche and image of Buddha, above a silver ball.



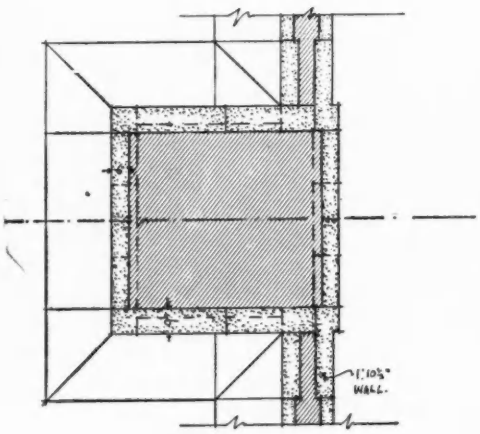
The Buddha, when lit, after dark, shows a halo —the bevel of a glass disc

Durham County War Memorial

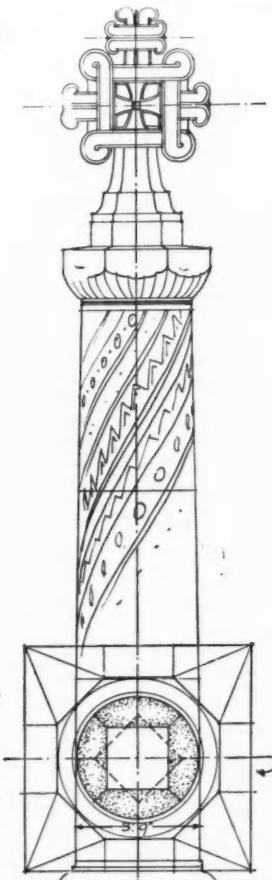
DESIGNED BY
PROFESSOR C. H. REILLY

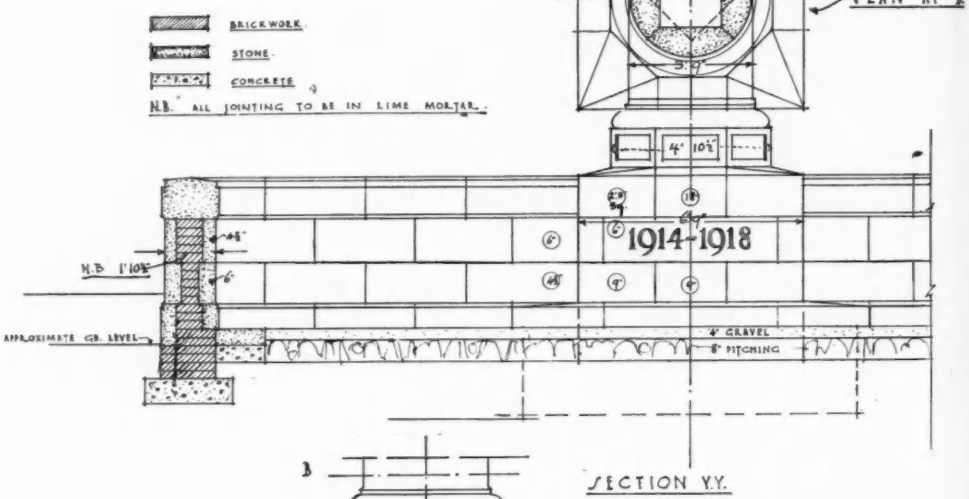




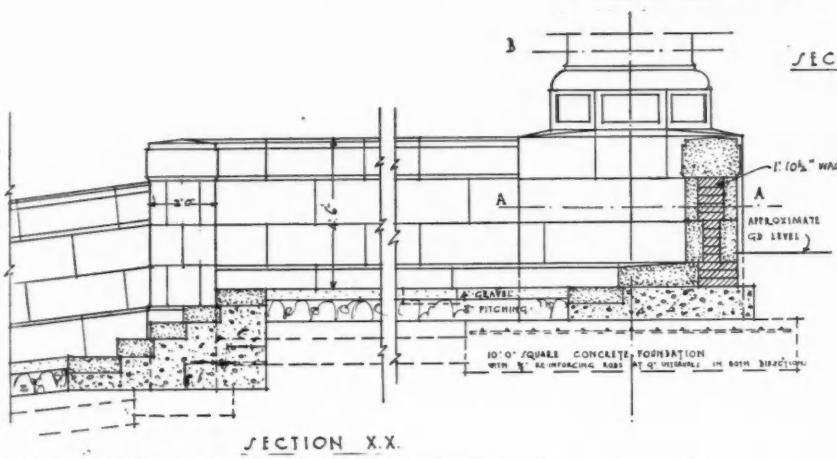


SECTION A.A.





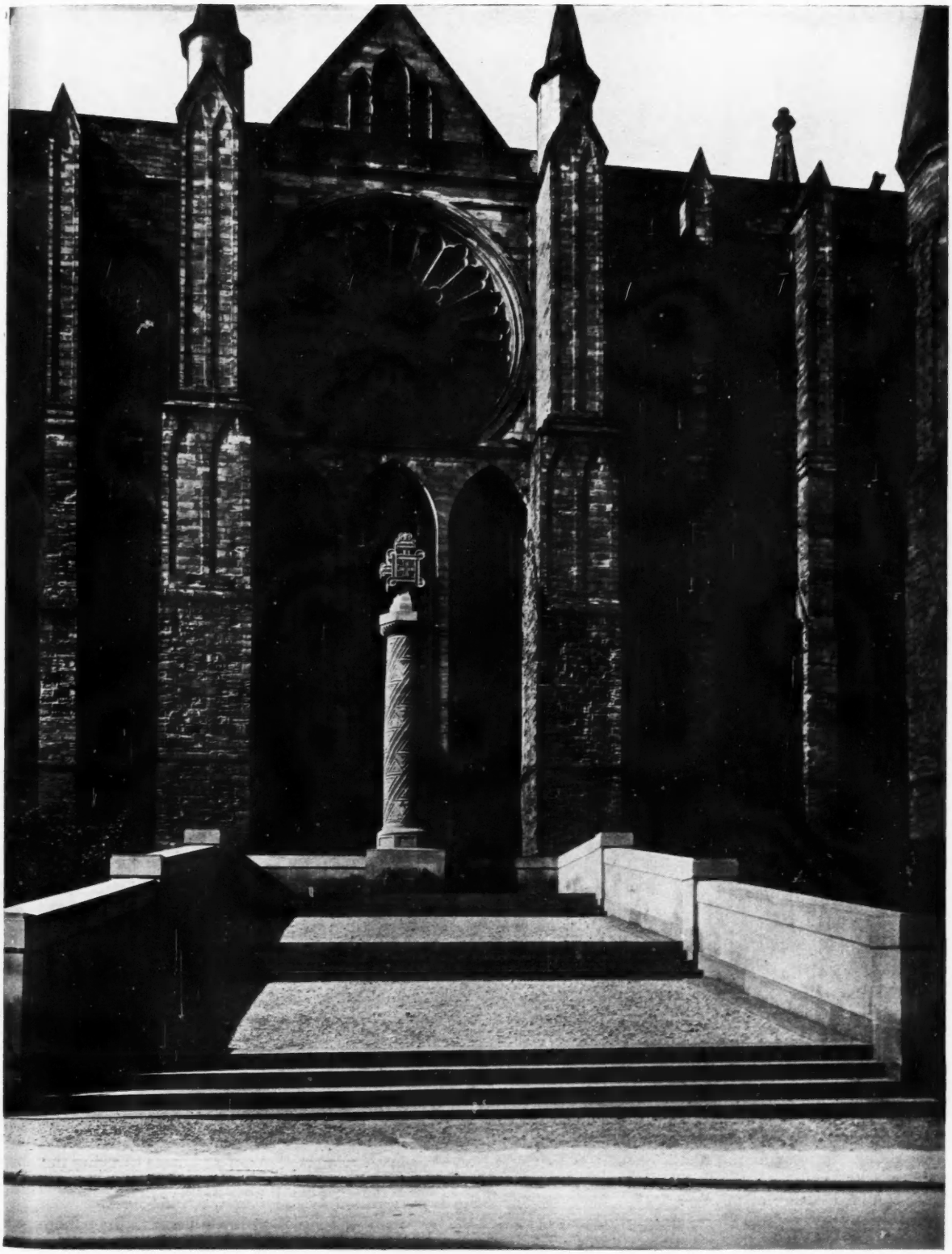
SECTION Y.Y.



SECTION X.X.

The Durham County War Memorial, illustrated on this and the facing page, stands within the precincts of the cathedral, immediately before the east end. It has been designed as a stout column of Norman type to harmonize with the Norman columns of the nave. A memorial of slighter proportions would have been out of scale with the great buttresses near it.

DESIGNED BY : DURHAM COUNTY WAR MEMORIAL : PROFESSOR C. H. REILLY



Although the memorial is in the Norman style, the enrichment is entirely modern, and consists of carved representations of war equipment—water bottles, steel helmets, etc.—in lozenges. No figure decoration was allowed by the cathedral authorities. The column, therefore, is crowned by an elaboration of the cross of St. Cuthbert, the patron saint of the cathedral.

OFFICE BUILDING IN THE CITY

No. 13 Rood Lane, E.C.

DESIGNED BY GORDON AND GORDON



The front elevation is faced with white glazed faience ware, tied back to the reinforced framework with bent steel rods let into the concrete. Re-entrant bays were introduced in the thickness of the wall of this elevation to make the most of the lateral lighting up and down the narrow street.

THIS new building has been erected for Messrs. Rood Lane Properties, Ltd., and is principally occupied by Messrs. Gow, Wilson and Stanton, tea and rubber share brokers. It is of reinforced concrete construction throughout.

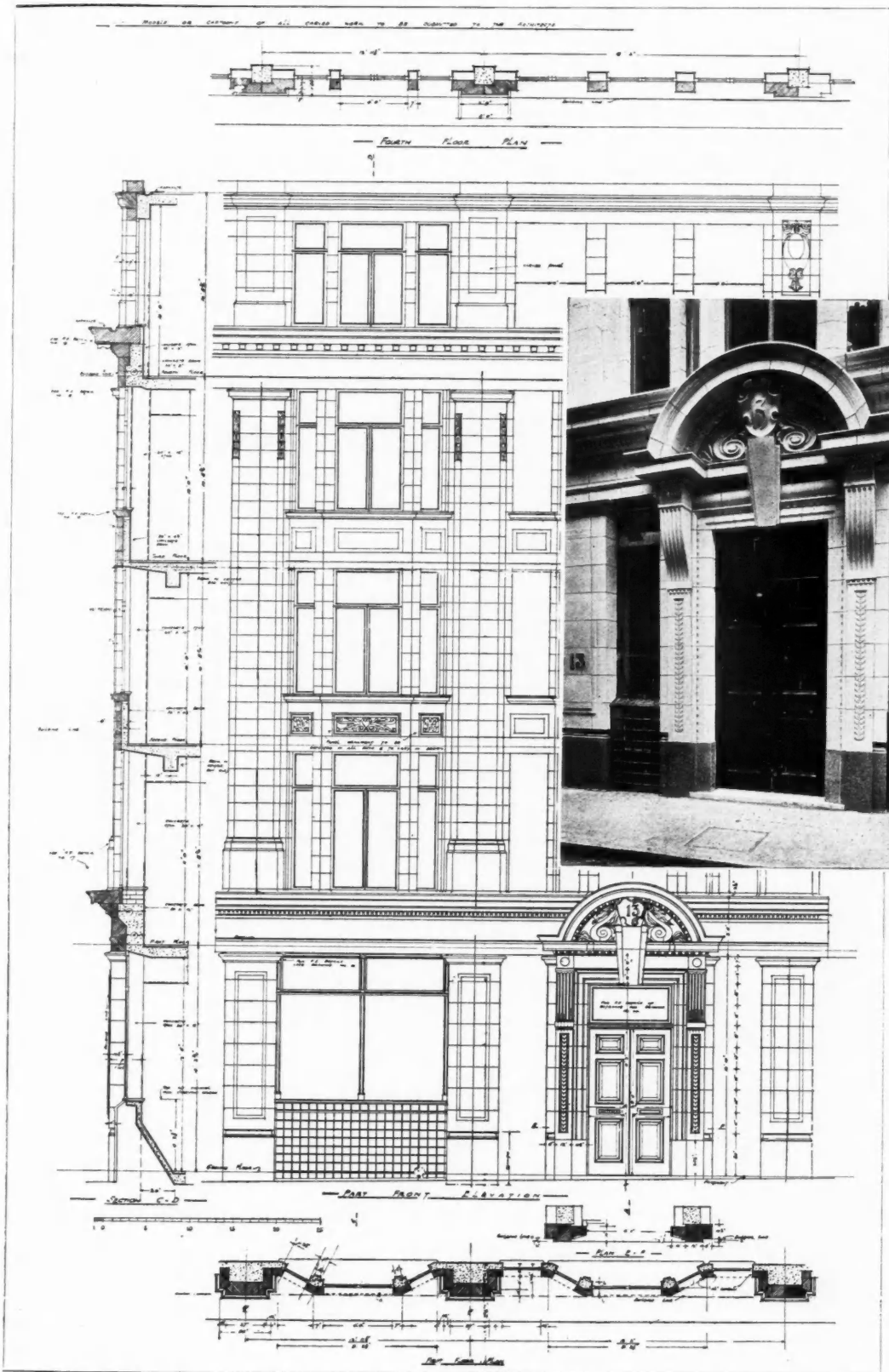
The floors are formed entirely in concrete, seven inches thick, reinforced both ways. The floor beams over the front and back windows have been inverted, so as to allow the window heads to be carried above the ceilings, thus obtaining the maximum amount of light, which was very important, owing to the narrowness of the street and the confined nature of the site.

On the upper floors there are only two detached reinforced concrete columns, the remainder forming part of the walls. Steel spiral reinforcement was used in these columns to make them as small in area as possible. The retaining walls and floor of the basement have been t anked with asphalt, sandwiched between layers of concrete.

The staircase, including the steps, is formed in reinforced concrete, carried on reinforced concrete strings, the surface of the treads and risers being finished with granolithic.

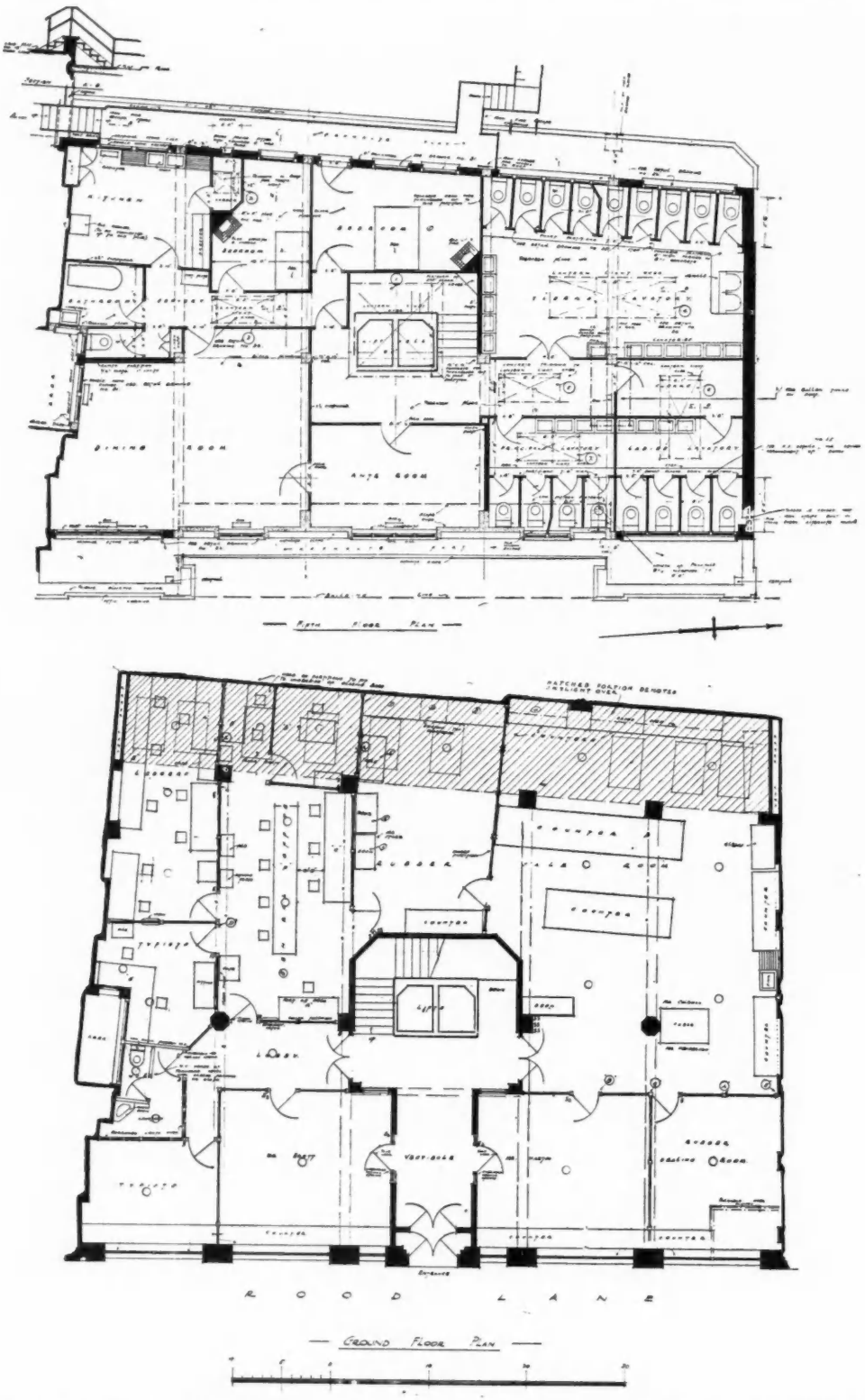
During the erection of the building a question of ancient lights had to be dealt with. This necessitated redesigning and sloping back the upper portion of the front elevation, and the main reinforced concrete beams carrying the floor had to be cranked and strengthened to receive the eccentric loads transmitted by the piers where set back.

The cost of the building, inclusive of fittings, amounted to £50,000. This works out at 3s. 7d. a cubic foot. The building was completed by the contractors in fifteen months.



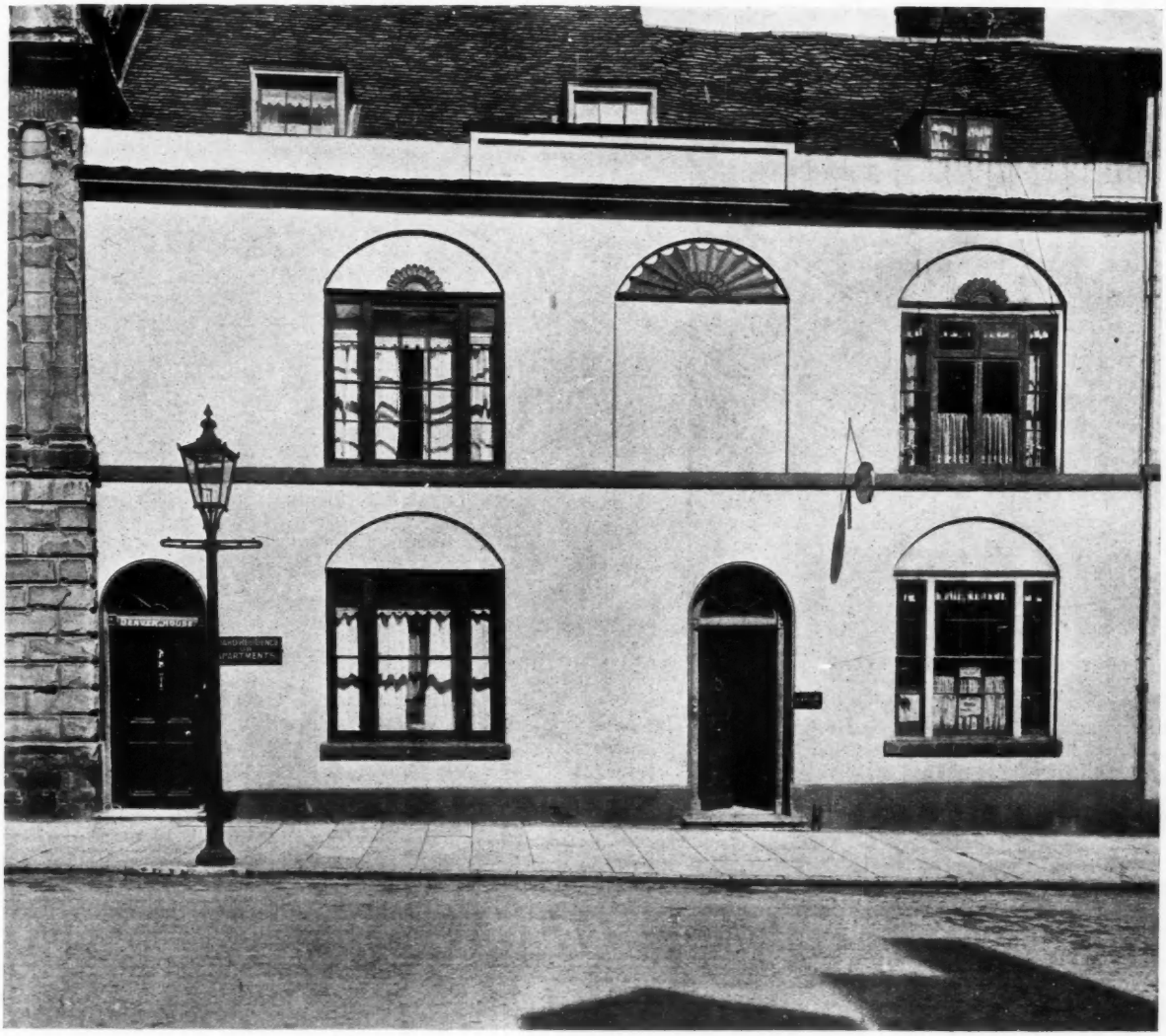
No. 13 Rood Lane, E.C.] [*By Gordon and Gordon.*

The architects' detail drawing of part of the Rood Lane façade; and a photograph of the main entrance doorway. The upper portion of the principal front was redesigned and sloped back during erection to solve a question of ancient lights.



No. 13 Rood Lane, E.C.] [*By Gordon and Gordon.*

Ground- and fifth-floor plans. The building is of reinforced concrete construction throughout, and is designed to comply with the requirements of the London County Council (General Powers) Act, 1909.



ENGLISH PRECEDENT No. 95

HOUSES, CHURCH STREET, WARWICK

It is hard to say whether this façade is a degeneration from a complete front, or a rather unsophisticated attempt to make use of elegant forms of decoration in vogue at the time of its erection.

The spacing of doors and windows is bad: the panel in the length of the blocking course is of little use; and yet, curiously, there is enough charm in the detail and in its relation to the smooth, clean surfaces of stucco, to make the whole a very attractive piece of street architecture. The reeded door architrave is exceptionally beautiful.

—[E. MAXWELL FRY.]

C

A HOUSE IN GUATEMALA, CENTRAL AMERICA

DESIGNED BY JOSEPH HILL



A photograph of the model of the house, looking towards the entrance front. As sited, it commands magnificent views.

ON this page are illustrated two photographs of a model of a house in Guatemala. This house has been designed to meet the special requirements of clients in Central America, and to take full advantage of the site, which commands magnificent views of lake and mountain scenery.

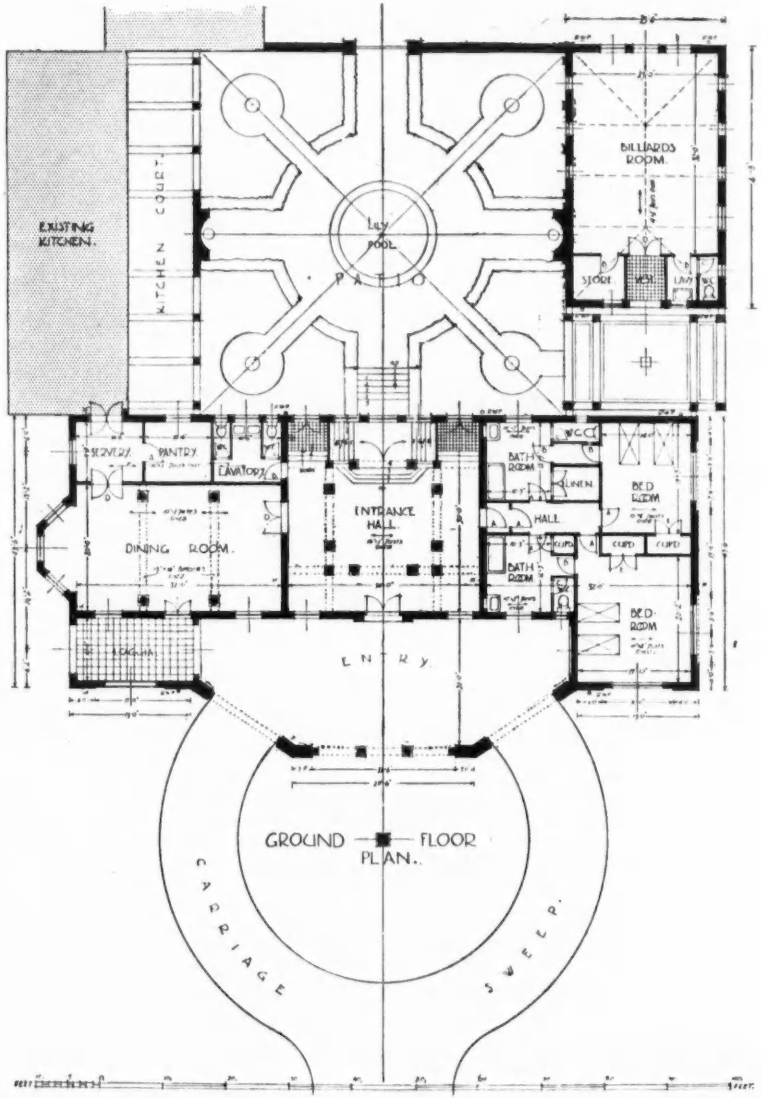
As will be seen from the plans on page 990, the accommodation provided includes three self-contained units, each separated from the remainder of the house by a hall. One of these units is on the ground floor, to the right of the entrance hall, and consists of two bedrooms, two bathrooms and w.c. The other two are on the first floor, and each comprise sitting-room, bedroom, bathroom and w.c. The two units on the first floor are planned on either side of the drawing-room, and are approached by a double staircase from the main entrance hall. Each on the upper floor has access to the long gallery, which runs the entire length of the entrance front over the ground-floor loggia and entry.

The entrance front of the house is approached by a broad carriage-way, terminating in a wide sweep and entry.

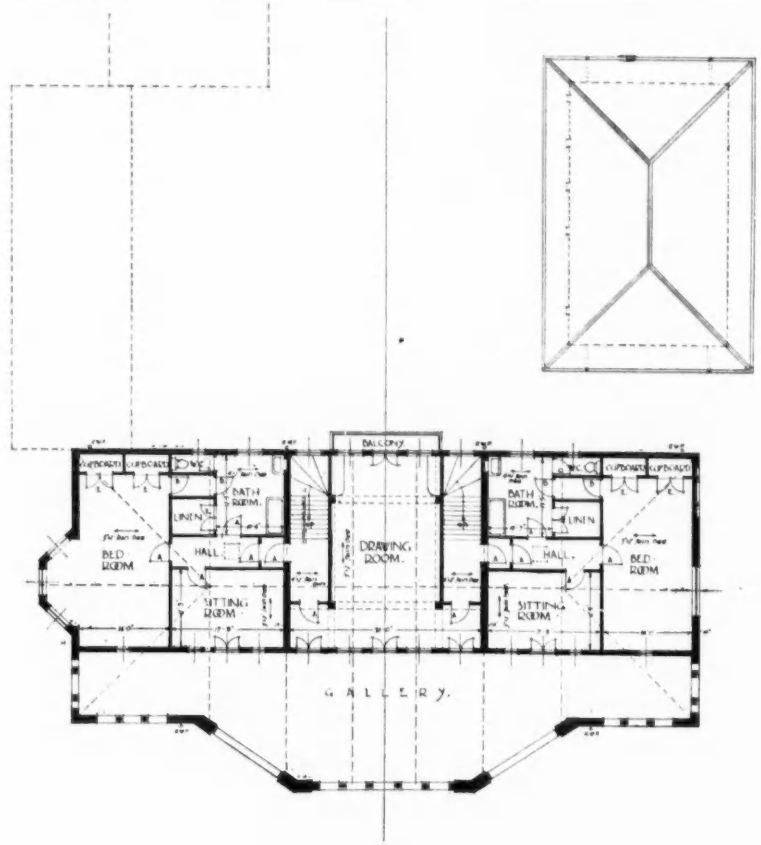
The main entrance, flanked by a loggia and amply protected from the rains prevalent during certain seasons of the year, leads into a spacious hall. From this hall access is gained to a patio, on the right of which is the billiards room and on the left the kitchen court.



Looking towards the patio, and garden side. The detached buildings are, on the left, billiards room, and on the right, kitchens.



House in Guatemala, Central America.]



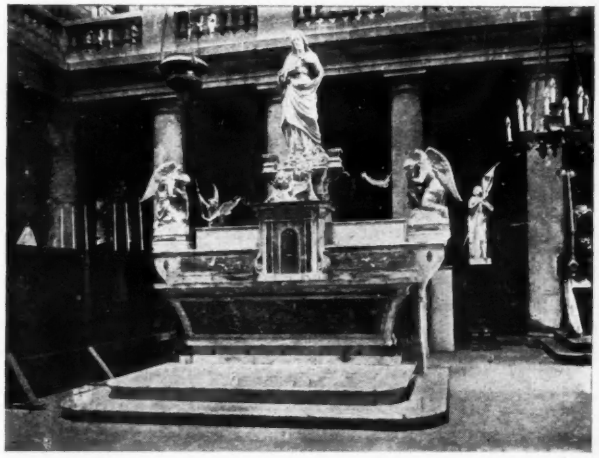
FIRST FLOOR PLAN.

Features of the ground floor are the two bedrooms and bathrooms designed as a complete unit to the right of the entrance hall, and the spacious entry, with its loggia. On either side of the drawing-room on the first floor is also self-contained accommodation, comprising bedroom, sitting-room and bathroom, and having access to the gallery which runs the entire length of the entrance front.

[By Joseph Hill.

A CURE FOR DAMP WALLS

BY ALEX. H. HAYES



A monument at a church in Rouen, one of the structures from which moisture was removed by the system of tubes described in this article. The tubes are seen inserted at the base of the monument. The system depends on capillary attraction and evaporation.

THE prevention of dampness in walls is a standing problem in building construction, and various means have been employed from time to time to prevent it. The two main causes of dampness are capillary action and condensation, the former causing moisture to rise in a wall from the ground, in some cases to considerable distances above the ground. Condensation is a different problem, and can usually be dealt with by means of adequate ventilation. In the following article is described a process for removing dampness and preventing it, by devices which automatically evaporate any moisture present and which take the place of the usual damp-proof course.

With regard to dampness in walls caused by capillarity, this is customarily combated by the introduction of damp-proof courses in the brickwork or masonry, although this precaution does not always prove satisfactory. Hard substances, such as slates set in cement, or glazed stone-ware blocks, while preventing the upward passage of moisture, are liable to become fractured and disintegrated by uneven settlement of the building. Asphalt and bituminous materials are also used, but these have a tendency to soften in hot weather, and to squeeze out of the joint. Sheet lead makes an efficient damp-proof course, although it is expensive; but it is always liable to corrosion and destruction by acidity in the water rising from the soil.

Many old buildings still exist in which dampcourses were not inserted, and even where this protection has been included in construction, frequently it is found to have disintegrated in the process of time, allowing damp to rise and cause trouble. Apart from the possible damage to the contents of a room or building with damp walls, the walls themselves deteriorate, due to the effect of excessive moisture on the mortar or bonding material.

A further difficulty arises from the fact that where walls are liable to absorb moisture from rain above the dampcourse, the latter prevents any possible passage of this moisture down to dry earth. Hence, evaporation is the only means of removal when damp has once entered the walls.

A method of dealing with this problem which is not only interesting, but apparently quite effective, is that known as the Knapen method. In its full application it involves removal of moisture from the walls by capillary attraction and evaporation, combined with ventilation on the interior surfaces. This is effected by the introduction into the wall, at suitable points, of devices which serve to stimulate capillary movement of the moisture and accentuate the "breathing," which is the normal process of moisture removal. The devices in question operate on the principle that dry air, when brought into contact with a damp wall, absorbs moisture in a degree corresponding to its temperature, and by losing heat becomes heavier.

The fact has been well established that at temperatures between 32 deg. F. and 46 deg. F., a variation of only 2 deg. in the temperature will disturb the equilibrium between two columns of damp air; between 46 deg. F. and 62 deg. F., a difference of 4 deg. will have the same effect, the variation increasing in the same ratio with rise in temperature. Further, if a hole is made in the brickwork, it will be found that the temperature of the interior of the wall is lower than that of the surface. Therefore, when dry warm air penetrates the pores of the brickwork, the air absorbs any moisture present, becomes colder and more dense, and thus is forced to a low level.

The Knapen device for producing this effect consists essentially of a tube of porous material of high capillarity, due to its fine texture, and shaped with five salient angles, as shown in section, figure one. The tube is made of

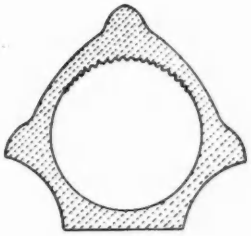


Figure one.

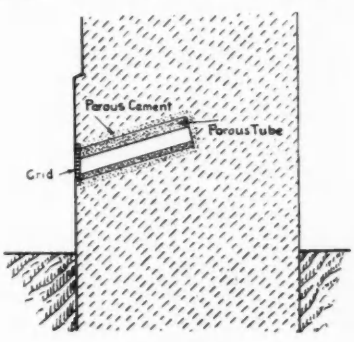


Figure two.

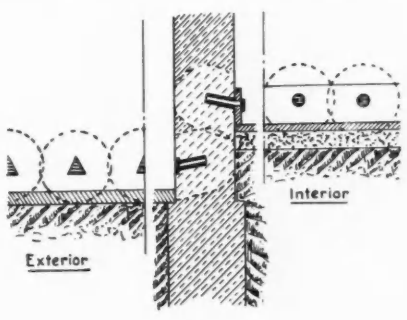


Figure three.

Figure one: The tube is of porous material of high capillarity, due to its fine texture, and shaped with five salient angles. Figure two: It is made of sufficient length to reach the centre of the wall. Figure three: When treating walls in waterlogged ground or in damp cellars, another row of tubes should be inserted inside the wall to present a double barrier to rising moisture.

[By Joseph Hill.

House in Guatemala, Central America.]

sufficient length to reach the centre of the wall, in which it is inserted by bedding in a special porous cement (figure two). The top section of the interior surface of the tube is serrated, or grooved, in order to increase its area of contact with air, and the outlet end of the tube is protected by a small grating to prevent the entrance of extraneous matter. When this device is built into a perfectly dry wall, no action is involved, but when moisture is present the porous tube rapidly absorbs it, and transfers it to the dry air within the tube. This absorption of moisture reduces the temperature of the air, and thus, by increasing its density, causes it to sink to the bottom of the tube, which, being set in a sloping position, discharges the cold air and allows a flow of fresh dry air in at the top. The presence of moisture thus creates a continuous circulation of dry air into the interior of the tube, which action continues so long as there is moisture present in the wall for the tube to absorb.

The area of wall over which each tube is effective is, of course, limited, and tubes to the necessary number are accordingly inserted so that the areas of activity slightly overlap. In this way a barrier against any rising moisture is created in the wall, and since the area of activity extends through to the inside face, it is usually only necessary to insert the tubes on the exterior in the position usually occupied by the damp-proof course. Not only is this process of moisture removal automatic, but, owing to their encased position, the tubes are not liable to damage and therefore do not require renewal.

When treating walls set in water-logged ground or in very damp cellars, in order to prevent any possible creep up the wall behind the tubes, it is advisable to insert another row of tubes inside the wall so that a double barrier is presented to rising moisture. This is illustrated in figure three. It will be noted that no water is discharged by the tubes, but only saturated air, which, when discharged inside a room, is removed by the provision of suitable ventilation. In regard to the possible capacity of moisture removal, it is claimed that each of these tubes can evaporate six quarts of water in one month.



In this photograph of the wall of a building at Versailles the tubes for the removal of moisture are seen inserted at the corners of the joints of the stonework.

The same devices are applied for dealing with moisture which penetrates walls from the top, in which case the tubes are inserted just under the eaves.

Apart from walls, another application is in connection with flights of stone terrace steps, which are apt to be forced out of alignment by the action of moisture and frost. It is usual in such cases to insert the tubes in the cross-joints between the slopes, the outlets resting on the top of the step below. The introduction of these tubes in every alternate two rows of steps permits the moisture to evaporate from the front of the steps, and prevents damage by reason of any absorbed moisture freezing. One instance of this application which may be mentioned is the long range of steps on the garden front at the palace of Trianon at Versailles.

There have been many notable applications of this process on the Continent, as, for example, the Abbey of La Chaise Dieu, in the Haut Loire, France, where dampness was badly affecting the mural paintings, but was cured completely by the introduction of this process. Another example is the Royal Palace at Brussels, where a test of the system resulted in its extension over the whole of the building.

In conjunction with the question of damp removal, the essentially associated



A notable application of the system in England: at New College, Oxford. The view shows how the tubes were introduced at about dampcourse level.



Lampton, Peek Estate, Wimbledon. Designed by James Ransome. Photographs of another house by Mr. Ransome are reproduced on pages 997–998.

subject of ventilation was investigated by Knapen, who proceeded to develop a system of aeration which would be effective throughout the entire room, and not leave the dead areas which too often occur. This system, which is an essential part of the Knapen method of dealing with the complete problem of ventilation and the removal of dampness, will be discussed separately in a subsequent article.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

Mr. Bracken asked the First Commissioner of Works whether he intended to give an opportunity to the architectural profession to compete for the work of designing the proposed new Government offices in Whitehall, and upon the Calton site in Edinburgh.

Sir Archibald Sinclair inquired of the First Commissioner of Works if he would state what steps he proposed to take for the selection of an architect for the new public buildings in Edinburgh; whether representative Scottish societies were being consulted; whether an open competition would be held; and, if so, by whom the designs would be judged.

Mr. Lansbury said that the proposals for the erection of Government buildings in Whitehall had not yet reached the stage at which the method of selecting designs could be decided. As regards the proposed buildings in Edinburgh, the design was being prepared under the supervision of the Chief Architect of the Office of Works. The views that had been expressed by various Scottish societies as to the selection of an architect had been very fully considered, but he did not propose to hold a competition.

Asked by Mr. Malone if he had made any investigations as to whether it would be possible to re-design the seating arrangements in the House of Commons so as to provide accommodation for all members, Mr. Lansbury said that a Select Committee investigated this problem as long ago as 1868, but no scheme had been developed in recent years. He was advised that a satisfactory scheme of reconstruction would involve large-scale alterations and very considerable expense.

Major Carver asked the First Commissioner of Works if members were again permitted to purchase privately portions of the stonework which was being removed from the exterior of the Houses of Parliament.

Mr. Lansbury replied that arrangements were being made to offer to the public, including Members of Parliament, portions of the stonework removed from the exterior of the Houses of Parliament buildings, at fixed prices.

In answer to Mr. L. Smith, Mr. Greenwood, the Minister of Health, said he regretted that a date for the introduction of the Slum Clearance Bill could not be fixed at present, but he hoped to be able to introduce it on an early day after the recess.

Mr. Smithers asked the Minister of Health if it was the policy of the Government drastically to deal with the slum problem; what new schemes, if any, had been initiated by the Government since it took office; and what was the estimated cost of those schemes.

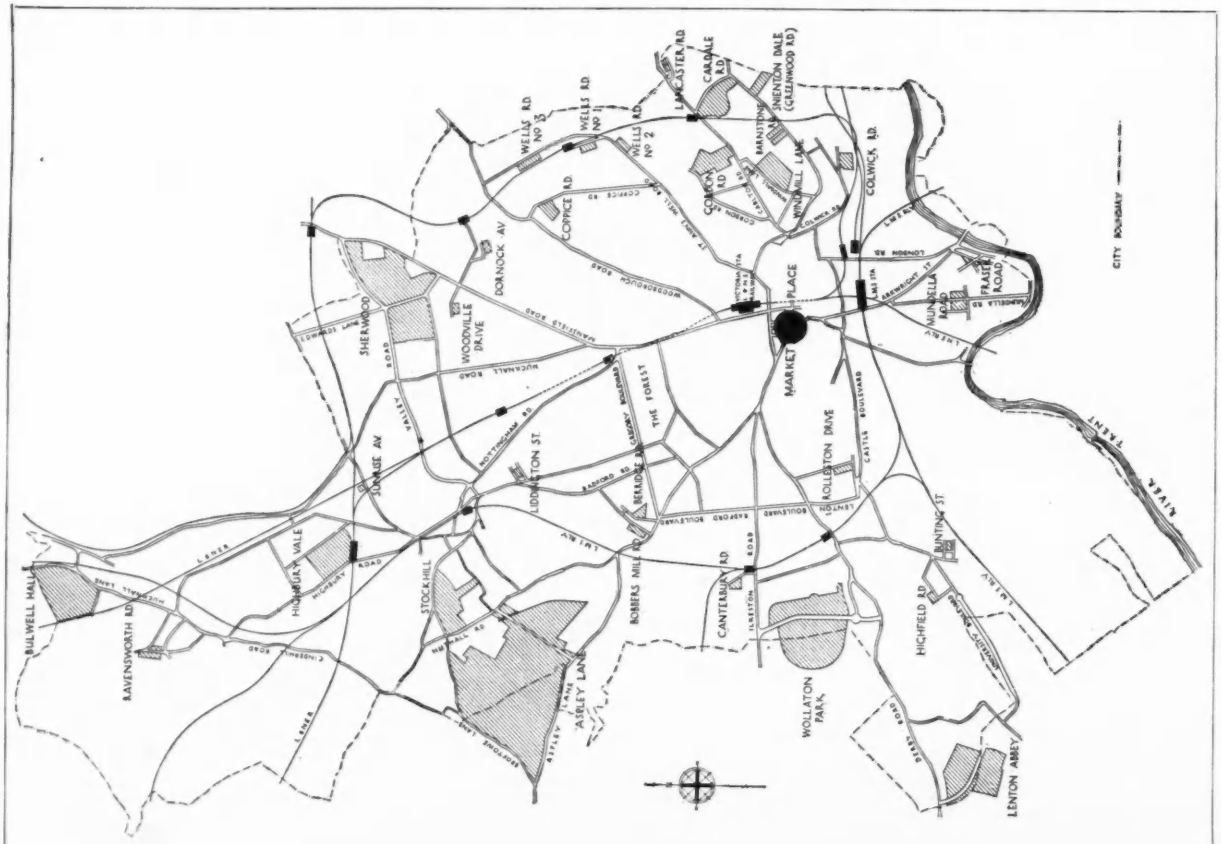
Mr. Greenwood said that as to the first part of the question, he would ask the hon. member to await the proposals for legislation which he hoped shortly to be in a position to submit. With regard to the last part, the Government did not initiate schemes of the kind. Six such schemes had been submitted by local authorities since the present Government took office, the total cost of which was estimated by those local authorities at approximately £511,000.

Mr. Mansfield asked the Minister of Health if he would consider lending money, at a low rate of interest, to local authorities who were anxious to build houses; and if there was any intention to increase Government grants for this purpose.

Mr. Greenwood said that the policy of the Government was to give assistance to local authorities in the provision of houses by means of direct Exchequer subsidy payable out of voted monies, and not by the means suggested in the question.



Deepdale, Wimbledon: one of a group of houses in the centre of the Peek Estate. Designed by James Ransome.



[*By T. Cecil Howitt.*

Two of the many types of houses erected in Nottingham; and a plan of the City, showing the housing estates.

From Nottingham Housing Schemes, 1919-1928.]

LITERATURE

NOTTINGHAM'S HOUSING SCHEMES

Since this country began to make up its accumulated deficiency of housing accommodation, the sources of supply have been twofold : public and private enterprise. Both have been in a sense speculative building, and both have been State-aided. Owing to the desperate need for houses, it can never be said that the speculative builders' risks have been such as would merit the name, for the risks have lain always with those whose speculation looked far ahead to the welfare of future generations. The speculative builder, pocketing his large profits and quick returns, and being under no Government compulsion to make any provision for what concerned him but little, has been allowed to put up an inferior type of house in such numbers as generally to stultify the extraordinarily fine efforts of municipal and other public bodies labouring under all the disadvantages of this unfair competition.

The deplorable results of speculative building unhampered by any real Government control are, though widespread, tempered to some extent by the developments of public authorities. No town has a finer record of such public enterprise than Nottingham. A glance at the plan of the city shows to what an extraordinary extent it has been able to cater for the housing needs of its population. Starting with a programme of 1,000 houses for 1920, and completing in that year only a little over a hundred, it had completed by the end of 1928 some 5,000 houses, with a programme that aimed at 7,000.

The record of their work from 1919 to 1928 shows a steadily widening grasp of the essentials of wise development. Each year these developments were made larger, and in spite of a wide variety in the design and siting of houses; in spite of abundant provision of open space, the saving of trees; and in spite of the thoughtful and human considerations that turn speculation into wise investment, the cost of houses diminished and the work was carried on with increasing economy, both in the construction of the houses and roads.

A special, narrow-fronted, non-parlour house was built for under £350, inclusive of site, roadways and sewers; the house itself costing less than £300. This is, of course, quite the smallest possible type, and one that it has not been found possible to reproduce in any numbers. It does, however, indicate the economies that may be made without sacrifice of quality, either of design or construction.

The report is published in book form, very attractively presented, with photographs, plans, graphs and details, and with type specification as an appendix. It is not only the record of a very fine work, but an impetus to all who are connected in any way with housing.

E. M. F.

Nottingham Housing Schemes, 1919-1928. By T. Cecil Howitt, A.R.I.B.A. *Nottingham City Council.*

THE ROMANCE OF A TUDOR HOUSE

In *The Romance of a Tudor House* Colonel J. C. B. Statham tells how he acquired an old timber and plaster house in the hope that " it may interest those who love old houses and would like to buy one and bring it back to its former strength and beauty." He mentions that the work he did has the approval of many antiquarians



From Nottingham Housing Schemes, 1919-1928.] [*By T. Cecil Howitt.*

An aerial view of the Wollaton Park Estate, Nottingham. This housing scheme, located on the eastern side, and forming a portion of the Park, was purchased by the Corporation in 1924, and stands in surroundings unsurpassed by any site in the vicinity of the city.

From Nottingham Housing Schemes, 1919-1928.] [*By T. Cecil Howitt.*

Two of the many types of houses erected in Nottingham; and a plan of the City, showing the housing estates.



From Nottingham Housing Schemes, 1919-1928.] [*By T. Cecil Howitt.*

A shop in rough-cast and tiles on the Wollaton Park Estate, Nottingham.

(by whom, no doubt, he means antiquaries) " and even the rating authorities have shown sympathy."

Notwithstanding the support given by these authorities, it is sincerely to be hoped that no one may try to follow in his footsteps. Fortunately, the house Colonel Statham acquired was a comparatively unimportant one, so that his enthusiastic but uninformed labours did little harm and, actually, he made habitable what was a ruin. The amount of manual labour he undertook during five years was prodigious, and he is quite frank in admitting his mistakes when he realizes them; as, for example, when he faced a brick wall " with planking and cement," in imitation of half-timber work, and when he invented a " projecting window " to take the place of one which had been flush with the wall.

Colonel Statham explains that he did not go to an architect for advice because " the only architects I knew were so eminent that one was ashamed at disturbing minds filled with schemes for saving bridges or planning cities " (one wonders who were his highbrow friends), and builders were even more inaccessible " because more profitable Government work was being pressed upon them."

The fact is that Colonel Statham embarked upon a novel enterprise without any experience, and did not even trouble to make himself acquainted with the subject by studying textbooks or other works by which he would have been informed : indeed, the bibliography which he gives, ranges from Boorde's *Dyetary of Helth* to Macquoid's *History of English Furniture*, but includes no work on architecture, building, or archæology of the house. The small photographs by which the book is illustrated give little idea of the problems encountered, or how successfully they were solved, but that of the front of the house exhibits to the experienced eye some of the mistakes made and opportunities missed for lack of expert guidance.

On the other hand, Colonel Statham tells his story easily and interestingly—more attractively, perhaps, than his achievements merit. His pen has the great gift of charm. He is conscientious and his enthusiasm is unbounded; at times he becomes sentimental.

NATHANIEL LLOYD

The Romance of a Tudor House. By Colonel J. C. B. Statham. Routledge. 12s. 6d. net.

HAUNTS OF OLD LONDON

Haunts of Old London is a collection of photogravure reproductions of twenty-five etchings by Mr. Joseph Pennell, published in similar form to *A Little Book of London*, by the same author, which appeared some months ago.

Each of the little pictures shows a landmark of historical or literary interest somewhere in London, and is accompanied by a brief description on the opposite page.

These descriptions contain items of historical and other interest, which fill the mind with visions of the " atmosphere " possessed by the particular subject.

A case in point concerns the tomb of John Bunyan at Bunhill Fields. Here, it is stated, " one may feel the utter desolation of death in a piece of ground of perhaps four acres in extent —of which not a square yard is without its human dust—thickly studded with grey and grimy headstones in every attitude of fatigue and despair, and with all the surroundings calculated to point to the mournful moral of the place." Not far from Bunyan lies Defoe, the author of *Robinson Crusoe*, and Henry, Richard, and William Cromwell are all close at hand. Here, also, is the grave of William Blake, a dreary resting-place for one who so loved " England's green and pleasant land." K.

Haunts of Old London. By Joseph Pennell. Peter Davies, Ltd. Price 1s. 6d. net.

READER'S QUERY

AN ARCHITECT'S LIABILITIES

B. B. writes: "*I noticed that in his concluding remarks on 'The Honeywood File' Karshish says that 'the architect's liabilities are for all defects due to his negligence, whether faults of himself, of manufacturers, of specialists, or of builders, which may appear within the limit of six years fixed by the law.' Can you inform me what, if any, legal rulings have fixed the period of liability as six years?*"

The question before me is whether an architect is liable for all defects due to his negligence, whether faults of workmen, of manufacturers, of specialists or builders, and the period this liability continues.

A man is liable for all acts flowing directly from his negligence, whether they can be contemplated or otherwise (Polemis's Case [1921], 3 K.B. 560), and continues to remain liable indefinitely. If he is sued at the expiration of six years from the accrual of the cause of action, he may plead that the action is barred by time (Limitation Act, 1623).

When damage is the gist of the action, time runs, not from the date the negligence complained of took place, but only from the actual happening of the damage (*see* Darnley *v.* Main Colliery Co. and Mitchell, 1886, 11 Appeal Cases 127).

If the injuries resulting from the negligence caused the death of a person, and the architect is sued by the personal representatives or next-of-kin of the deceased, the action must be commenced within 12 months of the date of the death (Fatal Accidents Act, 1846).

If the architect is constructing work in pursuance of an Act of Parliament, the action must be commenced within six months of the date of the negligence, and not when the damage occurred (Public Authorities Protection Act, 1893). A person is only liable for his own wrongs or the acts of his servants or agents. It depends on the facts of each case whether the person is servant or agent.

E. F. I.

LAW REPORT

QUESTION OF APPORTIONMENT: NO RIGHT IN JUSTICES TO ALTER

Mayor of Chatham v. *Wright and another. King's Bench Divisional Court. Before the Lord Chief Justice and Justices Avory and Swift*

This matter came before the Court in a case stated by the Justices of Chatham.

Mr. Scholefield, K.C., for the Chatham Corporation, said the question at issue was one of construction of the Private Street Works Act, 1892, and although the circumstances of the case were difficult to state, the short point was whether upon the hearing of an objection by two frontagers to the burden proposed to be placed upon them in respect of the make-up of a road, the Justices might relieve those frontagers of part of their burden, and leave the general body of ratepayers to pay the sum taken off the frontagers.

The Lord Chief Justice: Are you saying it can be done or not?

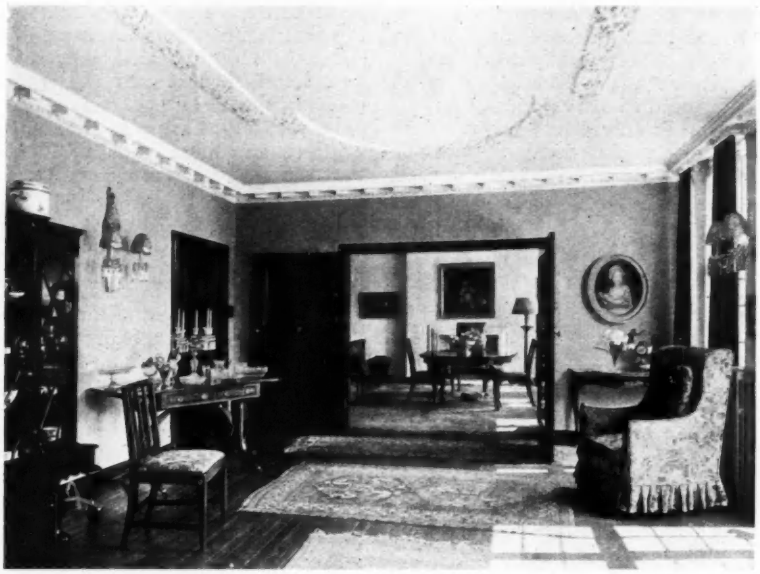
Mr. Scholefield: I say it cannot be done.

Proceeding, counsel said the Justices relieved the frontagers of £200, and left it to the general body of ratepayers to make up. In counsel's submission this was contrary to the scheme of the Act as set out in section 6, subsection 1, which said that the expenses incurred should be apportioned on the premises adjoining and abutting. Counsel submitted that that meant that the whole of the expenses should be apportioned, subject to the way in which the statute directed. In this case the Chatham Corporation agreed to contribute £300 towards the expenses and the Rochester Corporation £100. The total cost of the work was £1,249, and after making allowance for the £400 contribution, the amount to be apportioned was about £849. The Justices found that the works were necessary, and that the estimate was not excessive. They approved of the apportionment on all concerned, except the two respondents, whose apportionment was reduced to £100 each. The result was that this £200 was in the air, so to speak. He contended that the Justices had altered the proposals of the Corporation; they should have adjudged the matter and have given notice to the Corporation. The Justices had altered the resolutions of the Corporation. He contended that though the other frontagers had not objected, the Justices had no power to re-apportion the whole. They could not increase the quota of each frontager after the Corporation's resolution. The Justices could not do as they had done here, in view of the law and decided cases. The Justices held that the amounts claimed from the respondents were unreasonable.

Mr. Maurice Fitzgerald, for the respondents, argued in support of the decision of the Justices, and contended



Barrogill, Peek Estate, Wimbledon. Designed by James Ransome. The garden side (left) and a view from the lake (right).



Barrogill, Peek Estate, Wimbledon. Designed by James Ransome. These two rooms can be divided as necessary by the two folding doors in the centre.

that the Justices had the right to amend apportionments in two cases. The Justices had acted strictly within the powers of the Act.

The Lord Chief Justice said the difficulty was that the Justices had found that these two apportionments were too much, yet they found also that all the other apportionments in the road were proper ones, while the total expended by the local authority was accurate.

Mr. Fitzgerald said this road was going to be used as a by-pass road, and it was for that reason that the contribution of £400 was made. As it was important public work, he submitted that the Justices took the view that the respondents should only pay what they ordered. The Corporation could increase their contribution or carry out work that would cost £200 less. He argued that it was within the powers of the Justices to re-amend when the matter came before them.

The Lord Chief Justice: How can the Justices say that the Corporation shall contribute £200 more?

Mr. Fitzgerald said they were not saying this. They only said the apportionments of the two respondents were unreasonable.

The Lord Chief Justice: What are you asking us to do?

Mr. Scholefield: I should like the case to go back to the Justices with the opinion of this Court that the reduction they made was not within their power, and that they should re-arrange apportionment.

Mr. Justice Swift: The order of the Justices is inconsistent.

The Lord Chief Justice, in giving judgment, said the Justices decided that the works were not unnecessary, and that the estimated expenses were not excessive. They also found that the proposed works were unreasonable in this sense; that it was reasonable that the respondents should respectively not bear the amounts apportioned to them. The question was whether on the facts the Justices came to a correct decision according to law. It was abundantly clear that they had not. They had found the total right, and that the parts that went to make the total were right, except two, and that those two parts were wrong by £100 each. The appeal would be allowed; and the case would go back to the Justices that they might reconsider the matter and bear in mind that the whole must not be more than the sum of the parts, and that it was not within their province directly or indirectly to compel the local authority to make their contribution larger than that which they had decided to make.

Justices Avory and Swift agreed.

Appeal allowed, but no costs were given.

SOCIETIES AND INSTITUTIONS

MODERN ARCHITECTURE

The trend and achievements of present-day architecture and its reactions to past styles were explained by Mr. J. Theo Halliday, president of the Manchester Society of Architects, in a lantern lecture at the City Art Gallery, Manchester.

Architecture, he said, lay in the essentials of the building and not in the decorations — the trimmings; and there was nothing in the essentials of modern buildings to bring about a revolution. Trimmings of a building changed with fashion, but the essentials changed only with materials, conditions, and with the great changes that swept over the lives of the people.

Speaking of Liverpool Cathedral, he said the spirit of it was entirely of its own time, and its splendour did not come from trimmings, but from its strength, solidity, and the scale of the whole conception. The design was fresh and thoroughly sincere. Its interior was perhaps more traditional, although a striking feature was the contrasting of detail with mass.

Mr. Halliday, in conclusion, said they could not claim that there was any clearly defined new movement in architecture. He thought that people in a hundred years would look back in vain on 1929 for any strongly marked departure. It was not in our self-conscious attempts to be new, but in our frank treatment of modern problems that really true modern architecture would emerge.

THEATRES OF THE PAST

Sir Banister Fletcher, P.R.I.B.A., lecturing on Wednesday last at the Central School of Arts and Crafts, dealt with various public buildings which played their part in the social life of Ancient Greece.

The Propylæa at Athens, he said, with its imposing columns, showed the Athenian desire to dignify the approach to the dwelling of the virgin goddess. Greek theatres were not closed up and badly ventilated, but were open to the sky and air, and thus were suited to a race that valued physical fitness above all earthly possessions. Reference was made in detail to the typical Theatre of Dionysos, hollowed out of the side of the Acropolis and within the sacred enclosure of the Temple of Dionysos, to which it was connected by beautiful colonnades.

He also referred to the great Stadion of Athens in a valley between two hills, which gave long lines of seats for 40,000 spectators. Begun 331 B.C., it was finished by Herodes Atticus, and was now again restored for the revived Olympic games.

EARLY MEDIEVAL ARCHITECTS

Professor A. Hamilton Thompson, President of the Leeds branch of the Historical Association, in a lecture on "The Early Development of the Office of Works," at a meeting of the branch at the Leeds City Museum, said that a great mistake which had been made with regard to the history of medieval buildings was in the assumption that the "clerks of work" mentioned in the early chronicles were actually the architects of the buildings.

Professor Hamilton Thompson outlined the duties of the clerk of works, or "the viewer," as he came to be called. In the early part of the fourteenth century, he said, this title was changed to supervisor or surveyor.

TRADE NOTES

The Val de Travers Asphalte Paving Co., Ltd., with which is amalgamated Thos. Faldo & Co., Ltd., have acquired from the Neuchatel Asphalte Co., Ltd., for the period of their concession, the sole rights of supply of the asphalt from their mines in the Val de Travers, Switzerland, for all mastic work on buildings in Great Britain and Ireland.

Messrs. W. H. Gaze and Sons, Ltd., have secured the following contracts: Factory for Messrs. Cleeves, Ltd., at Clapham Common, Yetts, Sturdy and Usher, architects; new schools, Eltham, for the London County Council; new photographic laboratory, Hither Green, Messrs. Hood Bros., architects; new premises for Messrs. Montague Burton at Lewisham, Mr. Harry Wilson, architect.

Messrs. Redpath, Brown & Co., Ltd., have discovered errors which affect several pages in their *Structural Steelwork Handbook, 1928 Edition.* To correct these, revised leaves have been sent out by the firm, who request that the corresponding leaves from the handbook should be removed by cutting them along the inner margin and replaced by inserting the revised leaves, which are gummed along the inner edge for that purpose.

Another stage in the progress of railway electrification in India has been completed by the official opening recently of the main line of the Great Indian Peninsula Railway from Kalyan to Poona. The contract for the overhead equipment for this work was placed with British Insulated Cables, Ltd., of Prescot, and carried out by them to the specification of Messrs. Merz and McLellan, consulting engineers, of London and Newcastle. The overhead equipment of the main line contains several novel features. The total section of copper carried per track is 1 sq. in. divided into three parts: ·5 sq. in. main catenary, ·2 sq. in. auxiliary catenary, and ·3 sq. in. British Standard Section grooved contact wire. The main catenary is suspended at 220 ft. intervals by double porcelain disc insulators of the ball and socket pattern, and the contact wire is suspended by loop type contact-wire clips from the auxiliary catenary, thereby providing an exceedingly flexible line. The contact wire and catenaries are tensioned off at approximately every mile, the continuity of contact being made by a patented form of overlap span, which permits some of the tension stresses to be balanced, so reducing to a minimum the amount of steel required in the structures at such points. The current, it is claimed, is transmitted at 110,000 volts A.C. to sub-stations, where it is transformed and converted to 1,500 volts D.C., from which the line is fed. The total estimated cost of the electrification scheme is in the neighbourhood of £8,000,000, of which the contracts obtained by the British Insulated Cables, Ltd., amount to about £2,000,000.

THE BUILDINGS ILLUSTRATED

Following is a list of the specialists, general contractors and some of the sub-contractors. "Finella," Cambridge (pages 974–981). General contractors: W. Sindall. Sub-contractors: Docker Bros., Ltd., paintwork and composition floors; Macinlop, Ltd., rubber flooring; R. W. Steele & Co., central heating and hot-water supply; Art Metal Construction Co., Ltd., steel furniture; British Knapen, Ltd., anti-damp and aeration systems; Shanks & Co., Ltd., sanitary fittings; National Radiator Co., boiler and radiators; Tricity Radiators and British Electric Transformer Co., Ltd., electric light fixtures and radiators; A. J. Van Dugteren and Sons, electric light fixtures; Electric Wiring and Repair Co., electric installation; Henry Hope and Son, Ltd., and Uni-Hygea, Ltd., steel frame windows and doors; Nettlefold and Son, Ltd., and Huntley and Sparks, door furniture; Venesta, Ltd., plymax and plywood; Waring and Gillow, Ltd., furniture; Pilkington Bros., and James Clark and Son, Ltd., glass; Arthur Sanderson and Sons, Ltd., and Salubra Wallpapers, wallpapers; Ronuk, Ltd., floor polishing; James Powell and Sons, Ltd., trumpet vase.

Durham County War Memorial (pages 982-983). Carving, Tyson Smith.

No. 13 Rood Lane, London, E.C. (pages 984–986). General contractors, Trollope and Colls, Ltd., who were also responsible for the foundations, dampcourses, asphalt, reinforced concrete and fireproof construction. Sub-contractors: B. Goodman, Ltd., demolition and excavation; Shaw's Glazed Brick Co., Ltd., terra-cotta; British Challenge Glazing Co., and Luxfer, Ltd., patent glazing; Benham and Sons, Ltd., central heating; F. Polden & Co., Ltd., electric wiring and electric light fixtures; B. Finch & Co., Ltd., sanitary fittings; W. & R. Leggott, Ltd., door and window furniture; W. James & Co., Ltd., casements; W. T. Allen & Co., metalwork; H. T. Jenkins and Son, marble; Carter & Co., Ltd., tiling; Waygood Otis, Ltd., lifts.

House at Kendal (pages 1000–1001). General contractors, G. F. Martindale and Sons. Sub-contractors: J. Storey and Son, plaster work; L. Airey & Co., plumbing; T. Wileman and Son, decorations; Shanks, Ltd., sanitary fittings; Carter & Co., tiling; Ronuk, Ltd., polish work; H. Hope and Sons, leaded light casements.

The bath panels and flooring in Greystoke Court, Ealing, illustrated on December 11, 1929, were executed by Messrs. Asbestos Cement Building Products, Ltd.

The Cork Insulation Company Limited were responsible for the "Eldorado" cork tile flooring to the boardroom, directors' luncheon room, private offices and clerks' space behind the counters in Barclays Bank (Dominion, Colonial and Overseas), Gracechurch Street, E.C., illustrated in our last issue.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated, readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

37175. Coates, E. D. Moulds for concrete, etc., blocks. December 4.

37149. Dunker, L. H. A. Asphalt, etc., floors. December 4.

36899. Krupp Grusenwerk Akt.-Ges., F. Mixing machines for building materials. December 2.

37034. Mathmah Ges. Slabs, etc., for building purposes. December 3.

36971. O'Rourke, J. F. Door structures. Dec. 2.

ABSTRACT PUBLISHED

320054. Moulding building blocks. Clark, G. M.

COMPETITION CALENDAR

January 1. Municipal Pavilion with Refreshment Rooms and other conveniences on the site of the old Waterloo Hotel, at the corner of the Marine Parade and Terrace Road, Aberystwyth. Assessor: Arnold Thornely, F.R.I.B.A. Premiums: £100, £70, and £30. All designs must be sent to the Borough Surveyor, Corporation Offices, Smithfield Road, Aberystwyth, not later than January 1, 1930.

January 18. The Corporation of Swansea invite architects of British nationality to submit designs for the erection of Municipal Buildings, Assembly Hall, and Law Courts, proposed to be erected in Victoria Park, Swansea. Assessor: Henry V. Ashley, F.R.I.B.A. Premiums: £750, £500, £300, and £200. Applications for the conditions, etc., should have been made to H. Lang-Coath, Town Clerk, The Guildhall, Swansea, before July 20. Deposit £2 2s.

January 31. For laying-out a portion of the Stokes Bay area as a pleasure resort with public walks and pleasure grounds, for the Gosport Town Council. Application for plan of the estate and a copy of the conditions, with particulars of the prizes offered, will be forwarded on application to H. R. Mangnall, Town Clerk, Town Hall, Gosport. Deposit £2 2s. Latest date for submission of designs: January 31, 1930.

February 28.—The Accrington Corporation invite architects of British nationality to submit designs in competition for new Police and Fire Stations which it is proposed to erect on a site in Manchester Road, Accrington. Assessor: Herbert J. Rowse, F.R.I.B.A. Premiums: £250, £150 and £100. Conditions of the competition, together with a plan of the site and all particulars may be obtained from William Henry Warhurst, LL.B., Town Clerk, Town Hall, Accrington. Designs to be submitted before February 28, 1930.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BERMONDSEY B.C. has prepared plans for the erection of two blocks of flats at a cost of £16,300, on the Rotherhithe Street improvement area.

The CROYDON Corporation has decided to proceed with the erection of about 360 houses on the Mitcham Road estate.

The CROYDON Corporation has approved the scheme for the erection of a new maternity hospital at a cost of £15,000.

The Croydon Corporation has prepared a scheme for storm-water sewer works at NORBURY, at a cost of £90,000.

Plans passed by the CROYDON Corporation: House, Yew Tree Way, for Surrey Garden Village Trust, Ltd.; saw mill and joinery shop, London Road, for Messrs. Polden and Authers; alterations and additions, "King's Arms" hotel, Katharine Street, for Mr. L. H. Harrington; boiler house and mess room, Factory Lane, for the borough electrical engineer; dairy and alterations, Leslie Park Road, for South Suburban Co-operative Society, Ltd.; house, Hurst Way, for Mr. L. H. Harrington; six garages, Greenside Road, for Mr. A. J. Mellows; garage and office, Warwick Road, for Mr. L. White; three houses, Pampisford Road, for Messrs. G. and C. A. Parris; twenty-four houses, Falkland Park Avenue, for Mr. P. Richardson; garage and store, Mayday Road, for Mr. W. Lindsey; six houses, Wharncliffe Gardens, for Mr. P. Richardson; boiler house, Waddon Mills, for Mr. J. R. Wildman; bungalow, Featherbed Lane, for Mr. Green; hotel addition, Shirley Park, Addiscombe Road, for Messrs. Paish, Tyler and Crump; twenty-seven houses, Hurst View Road, for Mr. C. H. Ridge; house, Namton Drive, for Mr. W. D. Harrington; house, Sydenham Road, for Mr. G. H. Dams; two houses, Farleigh Road, for Mr. R. Costain and Son; two houses, Crescent Way, for Mr. H. Macintosh; alterations and additions, 39–47 North End, for Messrs. Batchelor and Son, Ltd.; extensions to maternity hostel, junction of Lodge Road and St. James' Road, for the Corporation; alterations and additions, London Road, for Messrs. Bethell, Swannell and Durnford; two houses, Ballards Way, for Mr. G. Warren Peachey; garages, stores, workshop and office, Thornton Road, for Messrs. Rees and Partners; two shops, Bishops Park Road, for Mr. H. Macintosh.

The L.C.C. is acquiring a site at Dog Kennel Hill, DULWICH, for the erection of 757 dwellings in buildings mostly five stories high.

At a meeting of the EAST HAM Corporation, the borough engineer submitted four schemes for the laying out of streets and the erection of houses on twelve acres of land in Charlemont Road; a scheme was approved, but the consideration of the types of houses to be erected thereon was deferred.

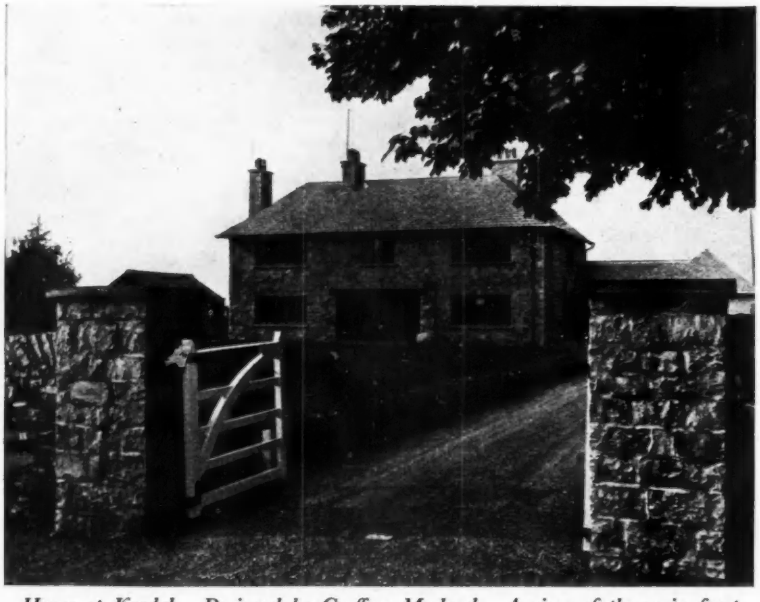


House at Kendal. Designed by Geoffrey Morland. The main staircase as seen from the hall. The staircase and floors of the building were executed in British Columbian pine, and stained a bright brown. The door seen on the right of the illustration gives access to the "cloaks."

The FINSBURY B.C. is to erect tenements and shops in Royley Street at a cost of £14,000.

Plans passed by the FULHAM B.C.: Building, High Street, for Messrs. Elkington and Son on behalf of Hodgkins, Ltd.; building, rear of 136 New King's Road, for Mr. H. A. Exton; buildings, North End House, North End Road, and lay-out of a site on southern side of Ranelagh Gardens, adjoining Hurlingham Court, for Messrs. Joseph.

The Middlesex C.C. is to carry out a scheme of improvement to Dollis Brook, HENDON, at a cost of £14,423 15s.



House at Kendal. Designed by Geoffrey Morland. A view of the main front. The walls are built of local rubble limestone, and the roof is covered with Westmorland green slates. The window frames are of English oak, oiled and fitted with leaded light casements. Both the front and garden doors are of oak.

Plans passed by LEWISHAM B.C.: Fifteen houses, Winsford Road, for Messrs. Middleton (Builders), Ltd.; twenty houses, Malyons Road, for Mr. P. B. Dannatt; school, Shroffold Road, for Messrs. Burnand and Pickett, Ltd.

Plans passed by the SHOREDITCH B.C.: Additions, Rosemary Wharf, Branch Place; three-story building, rear of 94 St. John's Road; building, 211 New North Road, abutting on Eagle Wharf Road; factory, 1, 2 and 3 Forston Site and 1–4 Eagle Wharf Road; partially reconstructing "Brunswick Arms" public-house, 25 Brunswick Street.

SOUTHERN COUNTIES

The BRIGHTON Education Committee is to remodel the Middle Street school, at an estimated cost of £7,000.

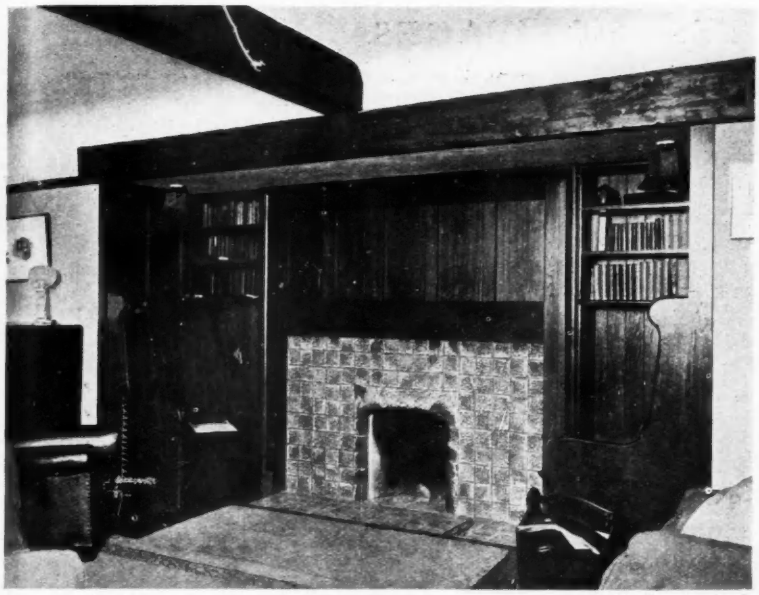
It is proposed to erect 140 houses on the St. Mary's estate, Bexhill Road, HASTINGS.

At a meeting of the HASTINGS Corporation the chairman of the Housing Committee stated that the rebuilding of the cleared areas in the Old Town has necessarily been delayed till the question of a new highway through the Bourne has been finally settled. Plans for about fifty additional houses on the Broomgrove estate have been prepared by the borough engineer.

Plans passed by the HASTINGS Corporation: Alterations to show rooms, Queen's Road, for Hastings and St. Leonards Gas Co.; two shops, Warrior Square, St. Leonards, for Mr. P. H. Oxley; house, Filsham Road, St. Leonards, for Mr. H. J. Richardson; three houses, Harold Road, for Mr. H. M. Jeffery; bungalow, Harold Road, for Mr. J. Hunt; two houses, Battle Road, St. Leonards, for Messrs. Pettet Bros.; bungalow, off St. Helen's Road, for Messrs. C. R. Salter and Son; alterations, Glanymor, Highland Gardens, St. Leonards, for Messrs. Callow and Callow.

Plans passed by the HERNE BAY U.D.C.: Ten houses, Herne Avenue, for Mr. C. H. H. Kenworthy; bungalow, Glen Avenue, for Mr. W. Hancock; house, Linden Avenue, for Messrs. Goodwin and Russell, Ltd.; addition to printing works, for Herne Bay Press, Ltd.; shop, Beach Street, for Mr. Blackwell; shop, High Street, for Mr. C. H. H. Kenworthy; additions, Girdlers Collegiate school, for Mr. R. Messenger; house, Selsea Avenue, for Mr. T. F. Mattock; bungalow, Queensbridge Drive, for Mr. G. R. Brown; shop, High Street, for Messrs. Wilbee and Son; shop, Broadway, for Mr. W. Hancock (amended plan).

A deputation of farmers from MAPLESCOMBE VALLEY, Kent, recently interviewed the First Commissioner of H.M. Office of Works and offered to give to the Nation an estate of a hundred acres in the Valley for the erection of a model village. The First Commissioner expressed his sympathetic interest, but pointed out that his department could not unfortunately act as it had no power to hold land for the purpose or to build. The



House at Kendal.] *[By Geoffrey Morland.*

The living-room, showing the fireplace recess and the panelled seats and shelves. The walls throughout the house are plastered and finished in lime and sand, with a slightly rough surface from a wood float, and then distempered a light cream.

matter has now been referred to the Dartford Rural District Council. The farmers desire that architects should be employed to lay out the estate and design the houses; and that the scheme should include a village hall, a model dairy and laundry, shops, playing fields, and tennis courts, but should be free from industrial or factory development.

SOUTH-WESTERN COUNTIES

The Dorset County architect has prepared plans for the erection of a school in Queen's Avenue, DORCHESTER.

The DORCHESTER Corporation Housing Committee is considering the acquisition of land for further housing schemes.

The PAIGNTON U.D.C. is to consider a scheme for enlarging the isolation hospital.

The PAIGNTON U.D.C. has obtained sanction to borrow £11,000 for a housing scheme.

The PAIGNTON U.D.C. recommends a site in Torquay Road for the proposed concert pavilion.

Plans passed by the PAIGNTON U.D.C.: Four houses, Barcombe Lane, for Mr. W. R. Toms; house, Osney Crescent, for Mr. W. H. Wills; additions (eight bedrooms), 58 Warefield Road, for Messrs. Willcocks and Barnes; four houses, off Preston Down Road, for Mr. R. H. Stockman; extension of store, rear 341 Torquay Road, for Mr. C. Geddes; ten shops, St. Michael's Road, for Messrs. C. and R. E. Drew; bungalow, Old Dartmouth Road, for Mr. C. Lacey; pavilion, Oldway Grounds, Torquay Road, for the Paignton and District Land and Development Co., Ltd.

Plans passed by the WEYMOUTH Corporation: Alterations to cottages, Rocky Knapp, Dorchester Road, for Messrs. Jesty and Baker; revised plan of club room, Ullswater Crescent, for Messrs. Andrews and Andrews; four houses, Wardcliffe Road, for Messrs. S. Jackson and Sons; house, Ullswater Crescent, for Mr. W. Knell; three garages, Ranelagh Road, for Messrs. Jesty and Baker, on behalf of Paragon Engineering Co.; six houses, Abbotsbury Road, for Messrs. Andrews and Andrews.

MIDLAND COUNTIES

The Ministry of Health is to hold an inquiry into the application of the GLOSSOP Corporation for loans for the proposed layout of Banks Wood and also conveniences at Banks Wood, Manor Park, Howard Park, Town Hall, etc.

The LEICESTER Education Committee has acquired a site in Kinkley Street, Braunstone, for the erection of an elementary school.

The STOKE-ON-TRENT Corporation is negotiating for ten acres of land in Shelton New Road for a housing scheme.

The STOKE-ON-TRENT Corporation has obtained sanction for a loan of £17,600 for the erection of forty-two houses on the Struria Vale estate.

EASTERN COUNTIES

The COLCHESTER Corporation has decided to acquire a site of twenty-five acres of land on the Harwich-Ipswich estate for the erection of houses, and has also acquired a site of four acres of land in the Harwich Road district for the erection of an elementary school.

Plans passed by the COLCHESTER Corporation: House, Gladwin Road, for Messrs. Grimsey Brothers; house, Straight Road, Shrub End, for Mr. B. G. Smith; two houses, Ipswich Road, for Mr. H. G. Pryke; house, Gladwin Road, for Mr. J. W. Staple; house, Nelson Road, for Mr. F. Humm; two houses, Gladwin Road, for Messrs. J. Moss and Son; two houses, Gladwin Road, for Messrs. Appleton and Sons; addition to warehouse, 161 Magdalen Street, for Messrs. W. Chambers and Sons, Ltd.; addition to biscuit factory, 115 North Station Road, for Mr. D. J. McPherson Burton, for the Priory, Ltd.; extension of sawmill, Military Road, for Messrs. Groom, Daniels & Co., Ltd.; additional floor, warehouse, Magdalen Street, for Messrs. W. Chambers and Sons, Ltd.; additions, "Berechurch Arms" public-house, Shrub End Road, for Messrs. Daniells and Sons Breweries, Ltd.; reconstruction of premises, 20 Long Wyre Street, for Messrs. Goodey and Cressall; two houses, Audley Road, for Mr. D. J. McPherson Burto

The LOWESTOFT Corporation is to acquire land in Church Road for the erection of an elementary school.

Plans passed by the LOWESTOFT Corporation: Shop, rear of 32 Clemance Street, for Mr. T. Dyer; two houses, Carlton Road, for Mr. W. Baldwin; shop, Carlton Road, for Mr. S. C. King; two houses, Kirkley Run, for Mr. T. H. Lambert; additions, London Road North, for Messrs. Catlings, Ltd.; three houses, Beccles Road, Oulton Broad, for Mr. J. A. Gaze; house, Corton Road, for the trustees of St. Peter's Home; house, Victoria Road, Oulton Broad, for Mr. Elliott; two houses, Waveney Drive, for Mr. J. A. Gaze; bungalow, Horn Hill, for Mr. J. W. Fisher.

NORTHERN COUNTIES

Plans have been submitted to the CHESTERFIELD Education Committee for alterations at the Brampton St. Thomas' School.

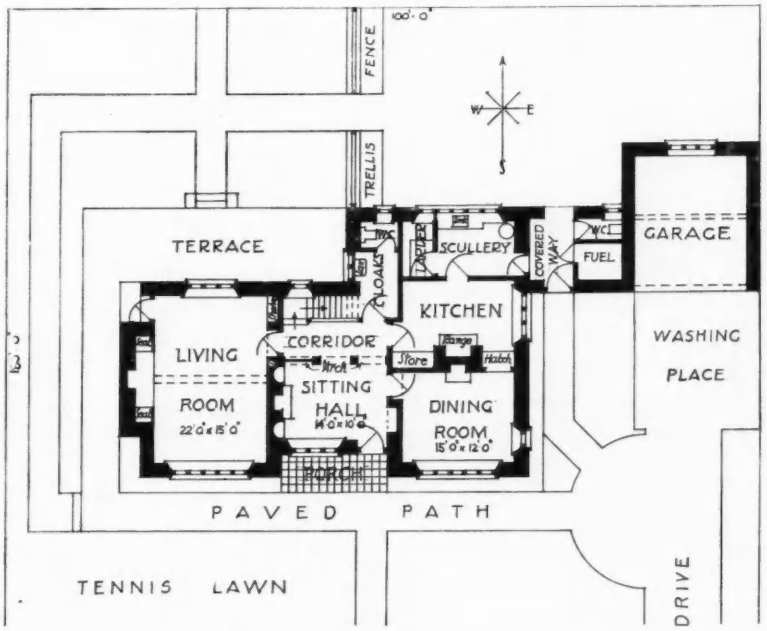
The Lancashire Asylums Board has approved a scheme to enlarge Brockhall Institution for mental deficients at LANGHO to accommodate 2,000 patients, at a cost of £90,006.

Plans passed at SELSDON: Forty-six houses, Selsdon Road and Sylvan Close, for Mr. G. Lewin; bungalow, Farleigh Road, for Mr. G. King; construction of sewer, Foxearth Road, for Messrs. R. Costain and Son; twelve houses, Addington Road, for Addington Park Estate, Ltd.

The TYNEMOUTH Corporation Housing Committee is considering the erection of further houses at Balkwell.

MISCELLANEOUS

Plans passed by DOUGLAS (I.O.M.) Corporation: Alterations to premises, Market Street, for Mr. W. H. Gribbin; alterations, Victoria Tavern, Drumgold Street, for Messrs. Okell and Son; additions, premises in Fairfield Terrace, for Mr. Miller; alterations to premises, North Quay, for Mr. Brown; house and shop, Allan Street, for Mr. J. Clague.



House at Kendal.] GROUND FLOOR PLAN. *[By Geoffrey Morland.*

Plan of the ground floor and lay-out of the garden. The house stands well back from the road, on a fairly level site, about 180 ft. deep by 100 ft. wide. This allows for a tennis court on the south side of the house, and a view of the Lake District to the north-west. On the first floor are five bedrooms and a bathroom.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 7½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teesside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1*s.* 4*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* NAVVY, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 10 0
Pit gravel, per yd.	0 15 0
Pit sand, per yd.	0 12 6
Washed sand, per yd.	0 13 0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2 8 0
Lias lime, per ton	2 0 0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1 3 0	*Trailer*	£0 15 0
3-ton motor lorry	3 15 0	*Steam roller*	4 5 0
Steam lorry, 5-ton	4 0 0	*Water cart*	1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0 1 6
SPREAD and level, including wheeling, per yd.	0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0 10 6
TRIMMING earth to slopes, per yd. sup.	0 0 6
HACKING up old grano. or similar paving, per yd. sup.	0 1 3
PLANKING to excavations, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.	
IF left in, add to above prices, per ft. cube	0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0 2 1
DO. 6 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube	1 17 6
DO. 6-2-1, per yd. cube	1 12 6
DO. in upper floors, add 15 per cent.	
DO. in reinforced-concrete work, add 20 per cent.	
DO. in underpinning, add 60 per cent.	
LIAS-LIME CONCRETE, per yd. cube	£1 14 0
BREEZE CONCRETE, per yd. cube	1 7 0
DO. in lintels, etc., per ft. cube	0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0 3 9
FINE concrete benching to bottom of manholes, per ft. cube	0 3 0
FINISHING surface of concrete spade face, per yd. sup.	0 0 9

DRAINER

LABOURER, 1*s.* 4*d. per hour;* TIMBERMAN, 1*s.* 5½*d. per hour;* BRICKLAYER, 1*s.* 9*d. per hour;* PLUMBER, 1*s.* 9*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0 0 10
DO. *6 in., per ft.*	0 1 3
DO. *9 in., per ft.*	0 2 3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 5 6
DO. *6 in., per yd.*	0 8 0
Portland cement and sand, see "Excavator" above.	
Leadwool, per cwt.	£2 0 0
Gaskin, per lb.	0 0 4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3
Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour.*

London stocks, per M.	£4 5 6
Flettons, per M.	2 12 6
White facing bricks, per M.	5 0 0
Multi-coloured facings, per M.	7 7 9
Best red facings, per M.	7 7 9
Rubbers, 9¼ in., per M.	12 0 6
Staffordshire blue, per M.	9 5 0
Firebricks, 2½ in., per M.	9 5 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. *headers, per M.*	20 10 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0

Cement and sand, see "Excavator" above.

Lime, grey stone, per ton	£2 11 6
Mixed lime mortar, per yd.	1 6 0
Dampcourse, in rolls of 4½ in., per roll	0 2 6
DO. *9 in. per roll*	0 4 9
DO. *14 in. per roll*	0 7 6
DO. *18 in. per roll*	0 9 6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32 0 0
DO. in cement do., per rod	34 10 0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0 1 0
BEDDING plates in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING do. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
DO. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
DO. picked stocks, per ft. sup. extra	0 0 7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side, per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in., per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around gullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

MASON

MASON, 1*s.* 9*d. per hour;* DO. *fixer,* 1*s.* 10*d. per hour;* LABOURER, 1*s.* 4*d.* per hour; SCAFFOLDER, 1*s.* 5*d. per hour.*

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 9
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 11 0
York templates sawn, per ft. cube	0 7 6
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6

Cement and sand, see "Excavator," etc., above.

HOISTING and setting stone, per ft. cube	£0 2 2

DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do., per ft. run	0 1 4
HALF SAWING, per ft. sup.	0 1 0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	£0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 7 6
YORK SILLS, W. & T., ft. cub. fixed	1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0 1 3
DO. 2½ in. thick, per ft. sup.	0 1 6

SLATER AND TILER

SLATER, 1*s.* 9*d. per hour;* TILER, 1*s.* 9*d. per hour;* SCAFFOLDER, 1*s.* 5*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies			£14 0 0
Countess			23 0 0
Duchess			32 10 0
Old Delabole	*Med. Grey*		*Med. Green*
24 in. × 12 in.	£42 11 3		£45 1 0
20 in. × 10 in.	31 4 3		33 0 6
16 in. × 10 in.	20 18 0		22 4 9
14 in. × 8 in.	12 1 0		12 16 3
Green Randoms, per ton			8 3 9
Grey-green do., per ton			7 3 9
Green peggies, 12 in. to 8 in. long, per ton			5 13 9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.			£0 0 6
Clips, copper, per lb.			0 2 0
Nails, compo, per cwt.			1 6 0
Nails, copper, per lb.			0 2 2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M			£5 18 0
Machine-made tiles, per M.			5 8 0
Westmorland slates, large, per ton			9 0 0
DO. *Peggies, per ton*			7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:	
Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6 7 0	
Grey-green do.	5 9 0	
Green peggies, 12 in. to 8 in. long	4 13 6	

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3 17 6
DO., machine-made do., per square	3 7 6
Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.	
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1*s.* 9*d. per hour;* JOINER, 1*s.* 9*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):	
7 × 3, per std.	£22 0 0
11 × 4, per std.	30 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 4 6
DO. *T. and G., 1 in., per sq.*	1 4 6
Planed boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 1 6
Mahogany, Honduras, per ft. sup. of 1in.	0 1 4
DO. *Cuba, per ft. sup. of 1 in.*	0 2 6
DO., *African, per ft. sup.*	0 1 3
Teak, per ft. sup. of 1 in.	0 1 2
DO., *ft. cube*	0 14 0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 4 6
DO. framed in floors, roofs, etc., per ft. cube	0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube	0 8 6
PITCH PINE, add 33⅓ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO., 3-ply, per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0 0 4½
DO. 9 in. wide and over per ft. sup.	0 1 2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅜ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4¼
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7¼
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up £0 3 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ⅜ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/32 in.			¼ in.			3/8 in.			½ in.		
Qualities ..	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	2½	2	2	5	4	3	6½	5½	4½	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	3	4	—	3½	5	—	6	—	—	—	—	—